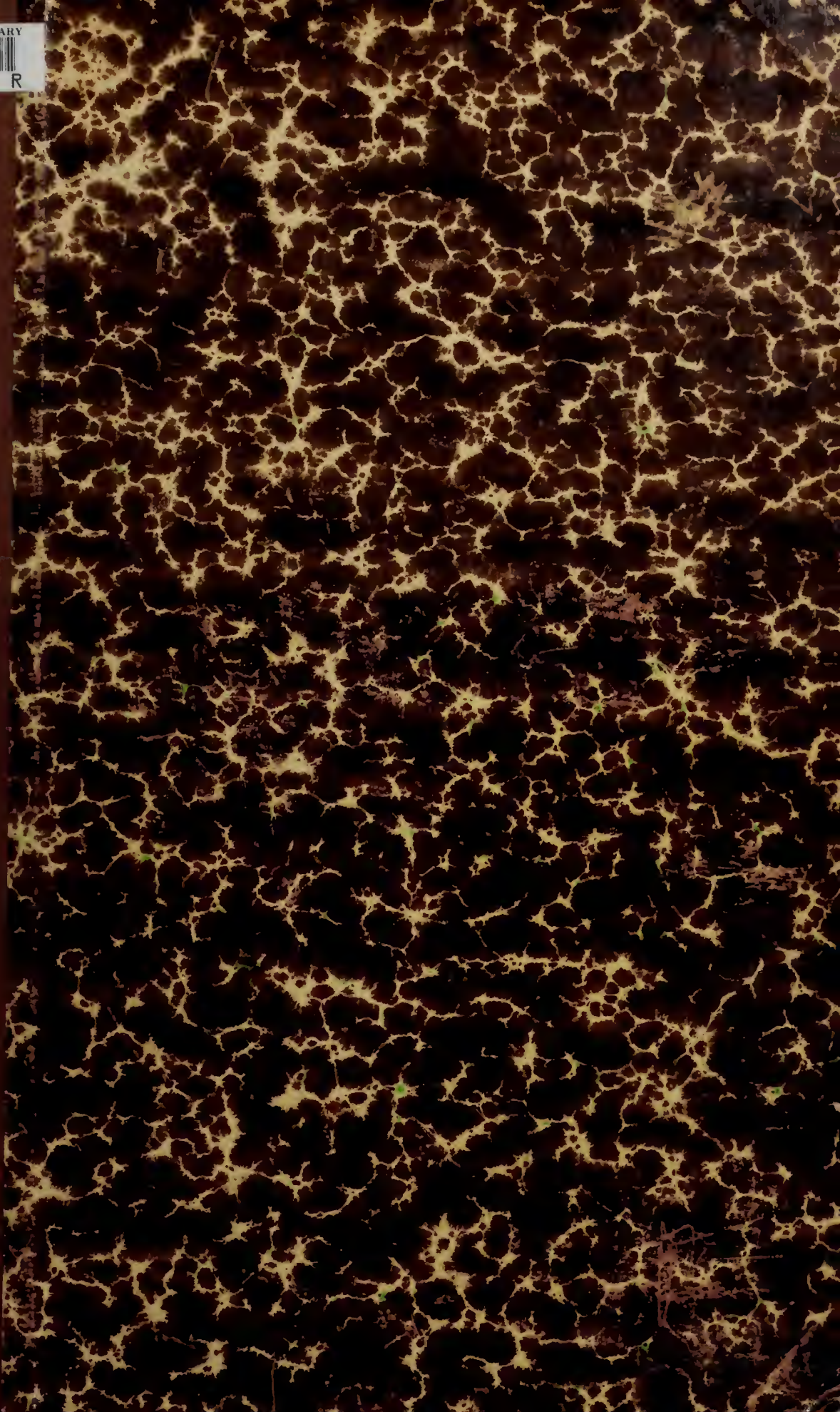


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SYMPOSIUM ON ACUTE SURGICAL PROBLEMS IN THE ABDOMEN

THE MODERN TREATMENT OF PERFORATIVE APPENDICITIS

T. C. DAVISON, M.D.
A. H. LETTON, M.D.
Atlanta

We are on the verge of the realization that at last a great stride has been made in the treatment of perforative appendicitis. In spite of the many great advances in surgery we have been unable to reduce the mortality rate of ruptured appendicitis below what it was half a century ago, until the present time.

In 1940 there first appeared a few scattered reports in the literature of the use of sterile sulfanilamide powder in the peritoneal cavity in cases of perforative appendicitis. The results in these and other series, including the one we are reporting, are almost unbelievable when compared with the previous high mortality rate of this disease.

In the past thirty years over one-half million persons in the United States have died from appendicitis or its complications, the average annual death rate reaching from 20,000 to 25,000 and increasing steadily as the years passed by.

U. S. PUBLIC HEALTH REPORTS RATE PER 100,000 POPULATION		MORTALITY PER 100,000 POPULATION IN GEORGIA	
Year	Rate	Year	Rate per 100,000
1900.....	9.7	1935.....	9.9
1905.....	11.9	1936.....	10.2
1910.....	11.4	1937.....	10.4
1915.....	12.5	1938.....	9.3
1920.....	13.4	1939.....	9.0
1925.....	15.2	1940.....	8.8
1929.....	15.2	1941.....	7.3
		1942.....	5.6

Read before the Medical Association of Georgia, Atlanta,
May 13, 1943.

In 1900 the mortality rate in the United States was 9.7 per 100,000 and by 1939 it had climbed to 15.2 per 100,000. In Georgia in 1937 the mortality rate was 10.4 per 100,000 while in 1942, after having used the sulfa drugs rather sporadically for approximately two and one-half years, the rate hit a new low of 5.6 per 100,000. In our opinion the apparent reduction in the death rate in these cases in Georgia is not due entirely to the use of the sulfa drugs, but partially to the efforts of the special committee appointed by President J. C. Patterson of the Medical Association of Georgia, in 1940. The function of this committee was educational in character and we carried the message to most of the high schools in Georgia, and to many civic organizations, in an effort to reduce the mortality rate in ruptured appendicitis in our state. The use of the sulfonamides began in 1940 and the table showing the mortality rate in Georgia reflects the increased use of these drugs.

There is probably no subject in the entire field of surgery which has received more attention in medical literature or has been more widely discussed at medical meetings during the past fifty years than that of appendicitis and its complications. In a review of the literature for the past few years we have found many suggested and tried technics and procedures. Briefly let us observe some of these in order that we may better evaluate our own conclusions.

Collins reports the Ochsner method gave him a mortality rate of 28.7 per cent, while the use of the antibacterial serums and the Ochsner method combined brought the rate down to 19.3 per cent. Welborn and Stubbs report no deaths from peritonitis using sulfanilamide in the abdomen. Baum-

gartner in Germany reports a death rate of 4.5 per cent after using the sulfa drugs in the abdomen. Ravdin reports 0.3 per cent mortality with the use of the sulfa drugs in the abdomen. Mueller and Thompson at the Roosevelt Hospital in New York reported 133 cases of peritonitis, appendiceal in origin, treated with the sulfonamides, with no deaths. DeCourcy reported a mortality of 4 per cent by use of appendicostomy drainage before the advent of the sulfa drugs. Eli S. Jones had a mortality of 1.4 per cent with appendicostomy before the advent of the sulfa drugs. Gamble reported a mortality rate of 1.5 per cent before the advent of the sulfa drugs which he attributed to leaving the abdominal wall open, closing only the peritoneum up to the drains placed in the abdominal cavity. One of us (T. C. D.) tried a few cases by Gamble's method, packing the abdominal incision with gauze saturated with pure glycerine for several days and then tying sutures of chromic catgut previously placed in the fascia and silk sutures in the skin. These sutures were tied after all drainage had ceased and the wound healed nicely by second intention.

MORTALITY RATE IN PERFORATIVE APPENDICITIS

U. S. Statistics (1940).....	—18 %
Pennsylvania	—24 %
Frankford Hospital	—23.6%
Totten (Los Angeles)	—23.5%
Mayo Clinic	—12 %
Jackson Clinic (Madison, Wis.).....	—12 %
Johns Hopkins Hospital.....	—10 %
Bunch and Dowdy (Columbia, S. C.) ..	— 9.5%
DeCourcy (Cincinnati)	— 4 %
Two Atlanta hospitals.....	—17.2%
Personal cases	— 8.5%

In the past thirty years over 500,000 American citizens have died from appendicitis and its complications. Forty-five thousand persons in this country suffered from perforative appendicitis last year, and approximately one-third of them died. One hundred and ninety-five thousand persons were operated upon for non-perforative appendicitis and less than 1 per cent died. Twenty per cent of all cases of acute appendicitis have already ruptured before the

patient is seen by the surgeon. Ninety-nine per cent of the deaths which occur from appendicitis and its complications may be attributed to the fact that some one has erred. It may be that the patient has delayed calling the doctor, or that grandmother has given a dose of castor oil, or it may be one of the few people who refused surgical intervention; and in some cases it is due to the physician himself failing to recognize the condition and recommend surgery. Recently we had a patient with ruptured appendix and general peritonitis who had been seen by a reputable physician 12 hours earlier, and he felt that he was in the clear inasmuch as he had advised her to call a surgeon, and then he gave her a hypodermic of morphine. The patient went to sleep and 12 hours later she had generalized peritonitis with 30,000 leukocytes per cubic millimeter of blood. She is alive today only by the grace of God and the use of sulfathiazole. There are still too many physicians who insist on a patient having all of the so-called "cardinal symptoms" of acute appendicitis, such as fever, increased pulse rate, pain, nausea, vomiting, localized tenderness, rigidity and leukocytosis. Many patients with acute appendicitis have only two or three of these symptoms; practically all of them have pain, only a few have fever until late, approximately only 60 per cent have nausea, a few do not have leukocytosis, while in others the rigidity is absent.

Acute obstructive appendicitis does not always present "cardinal symptoms," and it is in this type that perforation is most likely to occur. The temperature and leukocyte count are usually normal early, and it is in these cases of acute obstructive appendicitis that the interval between onset of symptoms and perforation is often very brief and the peritoneal cavity and the omentum are not prepared to form a protective barrier to combat the infection.

One of us (T. C. D.) has been impressed with the high incidence of the presence of one or more fecaliths at the site of the perforation, and sometimes free in the abscess cavity in cases of perforative appendicitis. The conclusions must be that fecaliths are often directly responsible for the greater

virulence of the attack and the tendency to produce earlier and severer pathologic changes.

Many physicians still believe in the so-called "conservative or expectant treatment." John B. Murphy deplored what he called epidemics of so-called conservatism in the treatment of appendicitis. This is dangerous doctrine to preach to the general practitioner, who is too often inclined to procrastinate too long anyway while gambling with the patient's life. We are all familiar with the records which follow discussions of this conservative method of treatment in medical journals, when each time it is followed by a noticeable wave of increased mortality.

Bower of Philadelphia states "there is no appendicitis mortality, but death is due to a spreading peritonitis following perforation." He has shown that delay and the use of purgatives are the main causes of this complication. Great credit is due Dr. Bower and his commission for their pioneer work in reducing the mortality in perforative appendicitis in the state of Pennsylvania.

The question of drainage always comes up. There are many advocates of non-drainage. Warren at the Peter Bent Brigham Hospital in Boston, reported a series of twenty cases not drained with three deaths, or 17.6 per cent, compared to sixty cases drained with eleven deaths or 18.3 per cent; but there were more secondary abscesses in the undrained series and more fecal fistulas in the drained group.

The mortality rate in perforative appendicitis varies a great deal, as to whether it is in the statistics of an individual surgeon or a larger group or clinic. Johns Hopkins Hospital reported a series of 479 cases of perforated appendicitis with a mortality of 10 per cent. The Mayo Clinic reports 12 per cent mortality. Dr. Arnold Jackson of Madison, Wisconsin, reports 100 cases with a mortality of 12 per cent. Dr. Jackson is now an enthusiastic advocate of chemotherapy; he and his associates not only use sulfathiazole in the peritoneal cavity with good results in the case of peritonitis, but he now advocates and uses it in all clean

wounds as a prophylactic measure, and he reports a large series of cases without an infection. The statistics in the smaller hospitals in perforative appendicitis run as high as 35 to 50 per cent mortality.

We present here a series of all cases of ruptured appendicitis treated at the Georgia Baptist Hospital and the white unit of Grady Hospital, Atlanta, for the past five years preceding January 1943. These cases include patients treated by both the most outstanding surgeons in Atlanta as well as those of lesser repute. Had these cases been those of one man as were some of the series mentioned above, we feel that the death rate would have been considerably less. We have chosen a period of five years because sulfa drugs have been used intraperitoneally only for the past two and one-half years. Thus we can contrast cases in the same hospitals, cared for by essentially the same doctors at about the same time.

We began the use of sterile sulfanilamide powder in the abdomen in 1940 in cases of peritonitis; later we changed to sulfathiazole crystals when the literature began to report cases of blocked kidneys with anuria due to a collection of sulfanilamide crystals in the kidneys and ureters. We now use sulfathiazole crystals routinely in all cases of perforative appendicitis, placing 5 to 10 grams in the abdomen and also 2 or 3 grams in the incision. After operation we give sulfanilamide solution subcutaneously and in some cases we have used sodium sulfathiazole intravenously, and also give sulfathiazole tablets internally.

We still drain most of our cases, using rubber tissue drains. One of us (T. C. D.) has seen fecal fistulas produced by the use of rubber tube drains and pressure necrosis. We present a summary of the sex and age grouping, the symptoms, the use of laxatives, laboratory findings, and a contrast between morbidity and mortality.

Sex. Ninety-five or 63 per cent of our patients were males; 37 per cent were females.

STATISTICS FROM TWO ATLANTA HOSPITALS

PERFORATIVE APPENDICITIS. TOTAL CASES 151.

	Female	Male	Total	Per Cent
1 — 10 yrs.....	11	15	26	17.2
11 — 20 yrs.....	13	29	42	27.8
21 — 30 yrs.....	7	20	27	17.8
31 — 40 yrs.....	7	9	16	10.6
41 — 50 yrs.....	9	9	18	11.9
51 — 60 yrs.....	7	10	17	11.3
60 and over.....	2	3	5	3.3
TOTAL.....	56	95	151	

Age. Twenty-seven and eight-tenths per cent of our patients fell in the 11 - 20 year age group; 52.8 per cent were less than 30 years old. It is interesting to note that the highest mortality was in the extremes of life.

Time. Twenty-six and seven-tenths per cent of these patients were admitted to the hospital between 36 and 47 hours after they noticed their first symptoms. Please note that three of our patients were admitted with ruptured appendicitis within the first 11 hours after their first symptoms. Thus we see that patients do not have to suffer for 12 to 24 hours before an appendix will perforate.

TIME FROM ONSET OF SYMPTOMS TO ADMISSION TO THE HOSPITAL

	Number	Deaths	Per Cent
Less than 11 hrs.....	3	1	33.3
12 to 23 hrs.....	6	1	16.6
24 to 35 hrs.....	22	3	13.6
36 to 47 hrs.....	15	4	26.7
48 to 71 hrs.....	38	6	20
72 to 95 hrs.....	27	2	7.4
96 or more hrs.....	40	9	25
TOTAL.....	151	26	17.2

White Blood Count. Ninety and four-tenths per cent of our cases had a leukocytosis ranging from 10,000 to 30,000. However, seven or nearly 5 per cent had a count of 10,000 or less; one was 4,500. You do not have to have a leukocytosis to have ruptured appendicitis.

WHITE BLOOD COUNT

	Number	Per Cent
Less than 7,000.....	1	0.6
7,000 to 10,000.....	6	4.0
10,000 to 15,000.....	38	25.2
15,000 to 20,000.....	59	39.4
20,000 to 30,000.....	39	25.8
30,000 or more.....	5	3.3

Laxatives. We have all been told that you should not give a laxative to people who suffer from abdominal distress; 36.2 per cent of our series had a laxative of some type. These people stayed in the hospital 19 days while those without laxative averaged 17.3 days. The death rate in those taking laxatives was 16.2 per cent as compared to 7.35 per cent in those not taking a laxative.

Drugs	Method of Administration	Hospital Days	Death Total	Death (peritonitis)
None		18.8	8.5%	8.5%
Prontosil	I.M. or P.O.	18.5	5.9%	5.9%
Sulfa	I.V., S.C., P.O.	13.2	20 % (a)	6.2%
Sulfa	I.V., S.C., P.O. & in abdomen	12.9	16.2% (b)	5.2%
Laxative		19		16.2%
No Laxative		17.3		7.35%

Morbidity and Mortality. Here we included only cases that were admitted to the hospital within the first 72 hours of their illness. We chose this limitation for we saw upon reviewing our charts that those who came after 72 hours were either moribund or had a localized abscess and would not lend themselves fairly to our comparison.

The average hospital stay of patients that received no sulfa drug was 18.8 days. Those who received no prontosil either intramuscularly or by mouth stayed 18.5 days, while those that received one of the other sulfa drugs, i.e., sulfanilamide, sulfapyradine, sulfathiazole or sulfadiazine by mouth, subcutaneously or intravenously stayed only 13.2 days. Those that received either or several of these drugs, in the abdomen alone or in combination with these drugs by mouth or parenterally, stayed only 12.9 days. Thus we were able to lessen the average hospital stay by almost six days by the use of the

sulfa drugs in the abdomen alone or in combination with the administration of these drugs after operation.

The death rate in those receiving no sulfa drug was 8.5 per cent. Neoprontosil by mouth or intravenously cut this to 5.9 per cent, while other sulfa drugs given by mouth or parenterally gave us a death rate of 20 per cent. However, one of these died of miliary tuberculosis and another of congestive heart failure, thus leaving a corrected death rate of 6.2 per cent. The sulfa drugs in the abdomen alone or in combination with postoperative administration had an uncorrected death rate of 16.2 per cent. One patient in this group died a cardiac death and another had 5 grams of sulfathiazole in the abdomen and then 440 grams of sulfanilamide subcutaneously. He developed anuria and died of uremia. Catheter proved ureters were full of crystals. This corrects our death rate to 5.6 per cent. This death occurred in an old man who had a herniorrhaphy and developed abdominal pain. He was too sick to operate on when he first became ill; it was thought wise to wait to see if the appendix would cool down. It ruptured. The second operation was more than he could stand. By ruling out these deaths there would be no mortalities in this group due to peritonitis, which is the "killer" of ruptured appendices. There were no deaths in our last ten personal cases. We made no attempt to contrast the actions of the different sulfa drugs because we felt our series was too small to be subdivided further and still be of real value.

The treatment of peritonitis is not limited to simply opening the abdomen and sprinkling in a little powder. The patient must be treated for all the sequelae and complications which includes dehydration, distention, vomiting, toxemia, paralytic ileus, pneumonia, cardiac failure and others.

The question of which incision is to be used, we fear, will never be settled; some prefer McBurney's for apparently good reasons, but we prefer to follow Murphy and many others in the use of the pararectus incision. We have never seen a situation which could not be handled through

this incision, but have met up with many situations which could not be handled through a McBurney incision.

The question of anesthesia arises; there are advocates for all of the various anesthetics but for the last four and one-half years we have used pentothal sodium intravenously with oxygen and find it to be the ideal anesthetic as it gives proper relaxation, produces no nausea, the skin remains dry preventing dehydration, it avoids excitement and the dread seen with other anesthetics and it is pleasant from the patient's standpoint.

We should maintain the fluid balance with saline and glucose intravenously and subcutaneously. When glucose is given intravenously we always partially cover it with insulin, otherwise a large portion of it is thrown out in the urine. Recently we have been using in selected cases with good results a combination of 5 per cent glucose and 5 per cent alcohol in saline intravenously; this combination is manufactured by the Baxter Laboratories. The alcohol is a food and a stimulant, and also an anodyne and hypnotic. Fewer hypodermics of opiates and other sedatives are required when the alcohol is used, and in cases of shock it elevates the blood pressure.

In cases of ileus with marked distention the oxygen tent gives great relief. Decompression of the intestinal canal by the Levine tube with suction is indicated in some cases. The rectal tube and the use of the 1-2-3 enemas and prostigmin, and the use of the heat cradle to the distended abdomen also gives great relief. The use of hypertonic salt solution intravenously is indicated in peritonitis where there has been great loss of fluids as a result of the peritonitis. The patient's position in bed should be changed often. For the unpleasant effects of hiccoughs carbon dioxide inhalations are indicated. The use of blood transfusions or blood plasma is indicated to combat hypoproteinemia caused by the transudate frequently seen in peritonitis.

The use of the sulfonamides has one danger which we foresee, which is: some of the practicing physicians, and even the laity, may in the future delay operation believ-

ing that if perforation occurs the sulfonamides will save the day.

The use of the sulfonamides has revolutionized the treatment of perforative appendicitis with peritonitis, as they are effective against the organisms which are commonly found in such cases — bacillus coli and the streptococci. We must realize the limitations and dangers in using this very valuable drug. The sulfonamides act in a prophylactic way only, acting against the invasions of infection but are of little use in attempting to overcome an advanced suppurative process. In other words, the use of the sulfonamides cannot displace the necessity for incision and drainage of pus. The proper use of the sulfonamides together with adequate surgery lowers tremendously the mortality of peritonitis caused by perforative appendicitis.

Conclusions

1. All patients do not present the so-called symptoms and signs of acute appendicitis, though they may have perforative appendicitis.
2. The use of laxatives in appendicitis more than doubles the mortality rate.
3. The use of the sulfonamides in the abdomen alone, or in conjunction with postoperative administration, markedly reduces the mortality rate in acute perforative appendicitis and may in the future entirely eliminate death from this disease.
4. The use of the sulfonamide drugs cannot replace prompt diagnosis and immediate surgery in perforative appendicitis.
5. Too much sulfa drugs may save the patient from peritonitis and yet cause his death from uremia.

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ACUTE CHOLECYSTITIS

ENOCH CALLAWAY, M.D.

LaGrange

Acute cholecystitis may occur primarily either as a clinical entity, as a complication of another disease, or as an acute exacerbation of chronic gallbladder disease which has existed for an appreciable period of time. Any effort to consider these together will inevitably result in confusion as the symptoms, pathologic changes, causative agents and treatment while similar are not sufficiently identical to be considered together without clearly outlining certain essential differences. Therefore, each will be taken separately before entering into a general discussion of the condition as a whole.

The primary acute attack of cholecystitis may have a gradual onset with vague symptoms, such as nausea, loss of appetite, pain in the epigastrium and right upper abdomen, chilliness and elevation of temperature. This may pass off in a few days and be referred to by the patient as biliousness

or indigestion. Many of these attacks pass without the patient seeking medical attention. Few such mild attacks are seen by a surgeon. At times these symptoms continue to increase in severity, vomiting occurs and there are definite tenderness and rigidity of the upper right rectus muscle. The pain becomes more severe but only occasionally reaches such intensity that morphine is necessary to relieve the colic. Unless biliary obstruction exists, very few cases fail to be relieved by medical treatment. Operation on such cases is extremely rare. Occasionally the onset may be sudden, with chill, elevation of temperature, nausea and vomiting. Relief may be equally as dramatic, or the symptoms may generally subside over a period of several days. As the sudden onset and severity of these attacks can easily cause the surgeon to suspect an acute abdominal catastrophe an appreciable number have cholecystectomies. These gallbladders are found to have an acutely inflamed wall with sufficient swelling to produce obstruction of the cystic duct. This condition not infrequently occurs synchronously with acute appendicitis. Surgery appears to be safe and probably saves the patient from future trouble of greater severity. If operation is not advised or is refused, the inflammation usually subsides and the patient recovers. Recovery may be complete, but in most instances the inflammation does not entirely subside, or adhesions remain and chronic gallbladder disease results. In a small proportion of cases the symptoms progressively become worse and operation becomes imperative. Rupture, gangrene and abscess may occur.

Gallbladder disease as a complication or following typhoid fever at one time was of major importance. The control of typhoid fever by vaccination and sanitation has almost completely eliminated this type of cholecystitis. When it does occur the presence of ulceration in the wall frequently causes abscess, gangrene or rupture. Cholecystitis not infrequently appears as a complication of influenza and other acute infectious diseases. As in primary acute cholecystitis these attacks usually spontaneously subside in the great majority of cases.

Gallbladder disease and duodenal ulcer are frequent companions and in patients known to have an ulcer, an acute gallbladder attack may be very difficult to differentiate from perforation. The frequent association of acute dilatation of the gallbladder with acute pancreatitis is of the greatest importance and should always be borne in mind since failure to drain and thereby relieve the pressure on the pancreas will inevitably result in death to the patient. Although urinary amylase varies considerably in health, I have found in a small series of cases that either a marked increase above normal or a continual rise in values indicates pancreatic disease. Various techniques have proven entirely satisfactory.

Acute cholecystitis occurring as an exacerbation of chronic gallbladder disease is the condition most frequently seen by the surgeon. A small number of these are not associated with obstruction and do not differ in any way from similar primary attacks. These subside rapidly and the patient almost invariably decides to postpone surgical treatment. Only after repeated attacks with intervening discomfort and digestive disturbances do these patients consent to the removal of the gallbladder. Acute cholecystitis with obstruction caused by a stone is the typical case of gallbladder colic. The pain is severe and nausea and vomiting are frequent. The upper right rectus is tender and rigid. A distended gallbladder can be felt where rectus muscle rigidity is not pronounced. Pain may radiate to the back. Temperature varies from near normal to 101 or 102° F. Pulse is proportionate to the temperature. The majority of these attacks rapidly subside although a considerable number increase in severity and demand emergency surgical treatment. Gangrene, empyema of the gallbladder and rupture may be found on opening the abdomen. Jaundice is a relatively infrequent occurrence in cholecystitis. When it occurs it is the result of biliary obstruction or severe hepatitis. As jaundice greatly increases the surgical mortality, operation is rarely performed until the jaundiced condition disappears. If operation becomes necessary cholecystostomy should be done. Cholecys-

tectomy and exploration of the bile passages can be performed after the patient's condition has sufficiently improved to justify an extensive surgical procedure. Vitamin K seems to be beneficial in this condition.

Gallbladder disease, unlike most acute abdominal conditions, will rarely produce death if no surgical procedure is undertaken. The fact coupled with the known high mortality rate of gallbladder surgery has a tendency to encourage postponement of operation from one attack to another. As the disease continues the liver damage gradually increases in extent and severity.

Therefore a serious consideration in these cases is to what extent the liver has been damaged. A large majority of the deaths following cholecystectomy are due to the inability of the liver to carry the extra burden thrown upon it by surgery. If the liver function is sufficiently good the patient will recover; if not, the patient dies.

We have attempted to evaluate liver function by several laboratory methods without any success. Recently published articles indicate that with improved technics and the use of several methods, we may soon have valuable laboratory aid on this very vital point.

While discussing the postoperative course and cause of death in gallbladder surgery with Dr. Hal M. Davison, of Atlanta, he suggested that preliminary administration of liver extract should improve the liver reserve, thereby making the postoperative course smoother and probably lowering the mortality. The idea appeared worthy of trial and the administration of 2 cc. of crude liver extract given intramuscularly daily for at least one week prior to operation and continued postoperatively until convalescence was well established was added to the usual preoperative and postoperative care. All patients having upper abdominal surgery are placed in an oxygen tent until full recovery from anesthesia and resumption of abdominal respiration.

In comparing the postoperative course of 15 patients given liver extract with that of 27 patients who did not receive it, a marked diminution of storminess in the postopera-

tive period was noticed. The beneficial results have been more apparent clinically than statistics show. The patients have looked better and have apparently had a much improved postoperative course. Nausea and vomiting have been reduced and no case has had sufficient distention to make the use of a Levine tube necessary. Average duration of elevated temperature in the group receiving liver extract was less than half the duration in the other group.

This series of cases is of course entirely too small for positive conclusions and final judgement must be withheld until a larger series can be studied. Liver extract certainly can do no harm and in my opinion is a valuable addition to the preoperative and postoperative treatment in gallbladder surgery. The development of liver function tests should aid greatly in evaluating its use and will aid also in indicating the optimal time for operation.

In analyzing all admissions for cholecystitis it was interesting to note that the following conditions were diagnosed as cholecystitis:

One case each of localized perforated duodenal ulcer, ruptured diaphragmatic abscess and calculus in the right kidney. Two cases of carcinoma of the pancreas, three cases of acute pancreatitis. Several cases each of tabetic crisis, herpes, liver abscess and coronary occlusion were admitted, but were properly diagnosed before reaching the operating room. From the above it would appear that differential diagnosis in these conditions is necessary. The above cases were carefully examined and considered. The majority were seen by two or more senior attending surgeons and while their true nature was suspected, the diagnosis of cholecystitis was considered most probable.

The perforated ulcer was of gradual occurrence and was well localized in the gallbladder region, and had not ruptured into the general peritoneal cavity. The patient had previously had a positive x-ray diagnosis of cholelithiasis. There was no severe pain, generalized abdominal rigidity or shock. Absent liver dullness, a most char-

acteristic sign in perforated ulcer, was of course not present.

The case of ruptured diaphragmatic abscess should have had a correct diagnosis as this patient had a bronchiectasis of long duration and had been acutely ill for several days with asthmatic bronchitis. There was no history of indigestion or previous gallbladder disease. The pain was sudden and severe and came on while coughing. Upper abdominal tenderness became rapidly more severe, gradually extending down on the right side. The high white count was discounted as due to pulmonary disease. As an operation appeared imperative the abdomen was opened under general anesthesia. Pus was found to be pouring over the liver along the lateral aspect of the falciform ligament. The gallbladder was not involved other than by the general peritonitis which existed.

In the two cases of carcinoma of the head of the pancreas, this condition was strongly suspected as being the cause of the biliary obstruction. Marked anemia, a slowly developing jaundice with increasing distention of the gallbladder, plus the absence of any history of gallbladder colic all suggested a malignant neoplasm.

The three cases of acute pancreatitis occurred prior to our use of the urinary amylase test. Fortunately, a diagnosis of fulminating cholecystitis was made and the abdomen was opened. The pancreatic capsule was incised and gallbladder and lesser peritoneal cavity drainage instituted. All patients recovered.

If the symptoms of pallor, cyanosis and shock frequently described as diagnostic of acute pancreatitis are allowed to develop, the patient almost invariably fails to recover.

The calculus in the right kidney was a freak case and of no general importance.

Tabetic crisis, herpes and coronary disease should always be suspected. Apparently they were easily diagnosed after a careful history was taken and a physical examination was made. In this series there was a gross error in diagnosis of 14 per cent; however, laparotomy was indicated and the proper procedure was carried out

in all cases except the case of renal calculus. In this case the bile ducts were explored and the gallbladder, which was diseased, was removed. Later the calculus was removed from the pelvis of a movable right kidney.

Eighty-four patients with cholecystitis were admitted but only 49 had operations performed. The tendency on the part of both the patient and surgeon to postpone surgery until severe liver damage takes place is no doubt a prime factor in the mortality rate. The duration of the disease prior to surgery and the mortality in this series show a very definite relation. Uncomplicated cases receiving surgical treatment early show a very low mortality rate.

ACUTE PANCREATITIS

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In discussing the acute abdomen one should seriously consider acute pancreatitis because of its infrequent diagnosis, its extremely high mortality, and the lack of unanimity of opinion as to the best method of treatment.

When one thinks of acute pancreatitis, one usually has in mind Moynihan's classic description of this condition: "Great prostration, and of all the pains the human body can suffer, this is by far the worst." But he was speaking of only the most fulminating type, whereas in reality the process varies in degree from one of mild edema of the pancreas to acute necrosis, and the symptoms would depend on which type the particular individual has.

The following is a typical case:

Report of Case

J. D. R., a white male, aged 51, was admitted to the hospital Sept. 14, 1939, with the diagnosis of acute gallbladder disease.

Past History: Had usual diseases of childhood, no complications. Had pneumonia and typhoid fever when

a boy and has had indigestion all of his life. For the past ten years he has had attacks of what were called gallbladder attacks; had been treated for ulcer of the stomach; has had several small hemorrhages from the stomach. For the past twenty years he has had a small midline epigastric hernia. Had a severe axe injury to his right foot five years ago.

Chief Complaints: Indigestion, pain in right hypochondrium, and small epigastric hernia.

He was taken sick after a full supper on Sept. 12, 1939, with severe pain along the right costal margin; vomited immediately and at intervals until admitted to hospital.

The next morning the pain became generalized and extremely severe over the entire upper abdomen, and abdomen became distended. He was given two large doses of salts with no results; and in the afternoon an enema, which produced no results. He vomited all medicine, and his pains were only partially relieved by morphine.

He was admitted to the hospital next morning and his temperature was 97.2° F., pulse 88, respiration 20. He was given an enema with only fair results. A Levine tube was inserted and he was given 1,000 cc. of glucose solution intravenously.

When admitted to the hospital his pain was rather severe and covered the entire upper abdomen, bored through to the back and radiated down towards the groins. He was distended in the upper abdomen and quite tender on both sides of the midline, with little rigidity of the upper abdominal muscles.

Physical examination revealed a large white man of 190 pounds, evidently in severe pain; head and chest negative except for tachycardia; blood pressure 145/85. His abdomen was distended, especially in the epigastric region. He was quite tender over both sides of midline, especially over the gallbladder region, but there was little rigidity. There was a small epigastric hernia which contained a small mass that could not be reduced. His leukocyte count was 18,100, with 93-per cent polymorphonuclear neutrophils. His urine on the day of admission showed 1 plus albumin, positive to bile, occasional hyaline casts, and no sugar. His blood sugar was 120 mg. per 100 cc. of blood.

Because of his continuous pain, constant vomiting, and distention, it was feared that he probably had a knuckle of gut caught in his hernia; therefore, we decided to operate on him immediately.

On opening the abdomen there was free bloody fluid, the stomach was dilated, the omentum edematous with areas of fatty necrosis, and his lesser peritoneal cavity was greatly distended. About 1,500 cc. of dark greenish bloody fluid poured forth. The pancreas was swollen and edematous throughout its entirety and of dark greenish color. The peritoneum over it was quite edematous. The gallbladder was distended, very red, and adhered to the duodenum, and there was a scar of a healed ulcer on the anterior surface of the duodenum, to which some omental tissue was adhered.

The lesser peritoneal cavity was opened and the fluid

aspirated, and a Penrose drain was inserted down to the pancreas. The peritoneum was split over the pancreas and a cigarette drain inserted into the tail of the pancreas. A cigarette drain was also inserted into the kidney pouch, and the abdomen closed. After a rather stormy convalescence he recovered but has had occasional attacks of pain in the upper abdomen since that time.

This was a rather typical case of acute pancreatitis of the severe type, typical in that it was not diagnosed and that the pain, being constant, radiated to the back and groins, constant vomiting, distention and tenderness extending to the left of the midline.

Etiology

The etiology of pancreatitis is confused, but from 70 to 80 per cent give a history of gallbladder disease. There are many theories as to the cause, discussion of which time will not allow here, but the process seems to be more of an autoclysis rather than an infection.

Incidence: In the past it has been considered a rather infrequent condition as shown by Walter's reporting only 17 cases in seven years at the Mayo Clinic. However, if one considers the milder attacks which are treated conservatively and are diagnosed clinically and confirmed by finding excessive amounts of diastase and amylase in the blood, the number is increased a great deal and it is no longer considered such a rare condition. As Eliason cites a collection of 1,278 cases operated on in a period of eight years, it occurs about equally in the two sexes, is most frequently found in the third to the sixth decades, although there have been cases reported from 2½ to 77 years.

Symptoms

The most important symptom is pain, usually following a full meal. The degree of pain is, of course, dependent on the severity and type of attack. Whether simply pancreatic edema, hemorrhagic, or necrotic, the pain usually is severe and often agonizing, continuous, and not colicky, and is only partially relieved by morphine. Beginning usually in the epigastric region, the pain extends across the entire upper abdomen, frequently radiating to the left and back and down into the groins.

Nausea and vomiting are probably the most constant symptoms and usually persist throughout the acute phase of the trouble.

Shock depends on the severity and type of attack.

One of the most constant symptoms is that of tenderness in the upper abdomen, extending left to the midline with very little rigidity.

As a rule, early in the attack the temperature may be subnormal or elevated very little, usually under 100 degrees. At first the pulse rate may not be accelerated, but frequently is and is weak. If the attack is severe, the pulse rate increases rapidly.

Distention in the upper abdomen comes on early and is due to ileus of the transverse colon.

Less frequent signs are cyanosis of the lips, face or upper abdomen, and Cullen's and Turner's signs; that is, bluish discoloration of the umbilicus and flanks, respectively.

Laboratory aids: The leukocyte count is generally high, above 15,000; the urine frequently shows albumin and bile, but rarely sugar; the blood sugar is not significant. The most important laboratory aid and the greatest advance in the diagnosis and treatment of acute pancreatitis is the blood estimates of amylase or diastase. In the early stages of acute pancreatitis both the blood and urinary amylase readings are increased. This is not true of any other acute abdominal condition. It is essential to make these tests early in the attack as the estimates may return to normal after 72 hours. There are several tests for these constituents; namely, the Meyer's, the Wohlgemuth's, and the Somogyi's.

Diagnosis

From the foregoing symptomatology it will be seen that the diagnosis of acute pancreatitis is difficult, as it mimics several acute abdominal conditions; namely, (1) Acute Cholecystitis; (2) Acute Perforated Ulcer; (3) Intestinal Obstruction; (4) Acute Appendicitis; less frequently, (5) Coronary Obstruction; (6) Renal Calculi; (7) Mesenteric Thrombosis, and (8) Black Widow Spider Bite.

In acute perforated ulcer there is a board-like rigidity of the abdominal muscles and in acute cholecystitis there is rigidity of the right rectus muscle with colic-like pain.

In these two conditions a flat x-ray plate may also reveal an air bubble under the diaphragm or the shadow of gallstones, respectively.

In intestinal obstruction the pain is intermittent and cramp-like, and again a flat plate should be of help.

In acute appendicitis pain is less severe and the pain and tenderness will generally localize in the right lower quadrant with rigidity of muscles in this area.

Coronary obstruction shows a change in blood pressure and certain heart findings. An electrocardiogram should make the diagnosis.

Renal calculi should show urinary findings, pain over one of the sides of the back, radiating to the bladder.

Mesenteric thrombosis should show extreme prostration and no elevated amylase reading.

In black widow spider bite there are cramp-like pains with rigidity of all of the muscles.

Finally, if an obese patient has a sudden severe epigastric pain accompanied by vomiting, shock, tenderness in the epigastric region radiating to the left, absence of fever, a relatively rapid pulse with high leukocyte count, one should think of the possibility of acute pancreatitis, and a very high blood amylase and diastase reading should confirm the diagnosis. However, the difficulty in making a correct diagnosis is attested by the fact that statistics from all writers agree that the correct diagnosis is made in less than one-third of the cases. Too frequently, as in our case, the diagnosis is not made until the abdomen is opened and blood-stained peritoneal fluid or areas of fat necrosis are found.

Treatment

Until the last decade treatment was almost universally immediate laparotomy with drainage of the lesser peritoneal cavity, drainage of the pancreas, and the bile passages. In the best of hands this method rarely gave any better than 50 per cent mortality. But, despite the high mortality, where perforated ulcer or intestinal ob-

struction cannot be ruled out, one should advise operation.

In the past few years, led by the Denmark surgeons, conservative treatment has been so successful that except in the suppurative cases one should withhold operation. If the diagnosis of acute pancreatitis has been made from the clinical data and confirmed by blood amylase readings, one should withhold food by mouth, institute duodenal suction drainage, give repeated doses of nitroglycerine, morphine for pain, and fluids parenterally until the attack has passed. Then if there is certain residue left, such as pseudocysts or abscesses or a gallbladder condition, this can be attended to after the patient is properly prepared for operation. Under this conservative treatment the mortality, as reported by all writers on this subject, is extremely low.

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TREATMENT OF PERFORATED PEPTIC ULCERS

Report of Thirty-Six Cases

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Perforation of a gastric or duodenal ulcer into the general peritoneal cavity is a catastrophe which occurs with dramatic suddenness and unless treated surgically, progresses in a definite manner with a typical course until the death of the patient about two or three days after the perforation. Frequently, it is one of the most easily diagnosed acute abdominal conditions provided the symptoms are known and appreciated, and it is the most important to diagnose early and treat promptly by surgical intervention. Delay in the diagnosis of ap-

pendicitis or an inflamed gallbladder is regrettable, but does not always cost the patient's life, but in the case of a perforated peptic ulcer a delayed diagnosis or a misdiagnosis, which leads to temporizing and delay, is equivalent to a death sentence, with very slight chance of reprieve.

If operation be undertaken within the first 6 hours recovery is the rule; if the opening of the abdomen be delayed for 12 hours recovery is doubtful; if 24 hours elapse prior to suture of the ulcer, the death of the patient is probable.

Peptic ulcer is an extremely common disease, and it has been recognized that the incidence of peptic ulcer is increasing; moreover, the frequency of acute perforation is becoming disproportionately greater. In the majority of cases of perforated peptic ulcers, the diagnosis is easy. However, the signs and symptoms produced by the perforation vary according to the time which has elapsed since the rupture occurred. The initial symptoms are usually the onset of severe abdominal pain. The patient may be feeling well one moment; the next he is writhing with pain and agony quickly followed by the characteristic board-like rigidity of the abdomen. Frequently in the doubtful cases, an x-ray examination of the chest and abdomen may reveal the presence of air under the right leaf of the diaphragm. Pneumoperitoneum is positive evidence of a perforated viscus.

In the management of a patient with a perforated peptic ulcer our obligation to the patient is to get him through alive. The primary object is to close the perforation by simple suture of the ulcer and aid the patient to overcome his peritonitis. Our next obligation is to determine by an adequate trial of medical management, after the patient has recovered from the perforation, whether the ulcer can be healed without operation. Then should medical management fail, radical operation in the form of subtotal gastrectomy should be carried out, if the patient's general condition and the location of the ulcer permit.

From 1937 to 1943, inclusive, there were admitted to the Marietta Hospital, Marietta, Ga., a total of 36 cases of perforated peptic

ulcers. In this series there were 35 males and 1 female. The predominance of the male sex is marked. In a recent review of autopsy records at Cook County Hospital, Chicago, Portis and Jaffe¹ found the ratio of essential peptic ulcer lesions in male and female patients to be approximately 8:1, respectively.

TABLE 1

AGE INCIDENCE OF PERFORATED PEPTIC ULCER

Age	Total Cases	No. Deaths	Mortality
20-30	6	0	0
31-40	9	1	11%
41-50	14	1	7%
51-60	5	2	40%
61-70	2	0	0%

The greatest number of perforations occurred in the fourth decade, although the figures for the first, fourth, and fifth decades approximate one another closely.

The gross mortality of this series is 11 per cent; 32 patients recovered and four died. Thompson² reports a mortality of 24 per cent from a study of 152 cases at the St. Louis City Hospital, St. Louis, Patterson³ reports a series of 35 cases with a mortality of 11 per cent. Davison and Rudder⁴ in an analysis of 155 cases occurring at the Grady Hospital, Atlanta, reported a mortality of 28 per cent.

The immediate mortality in acute perforation is dependent on many factors; namely, the interval between perforation, the type of operation, and the age and condition of the patient. The highest per cent of patients that recovered were those operated on within 6 hours after perforation occurred.

In this series the cases were divided into four groups:

TABLE 2

TIME FROM PERFORATION TO OPERATION

Hours elapsed	No. Cases	No. Deaths	Mortality
1-6	27	0	0
7-12	4	2	50%
13-24	3	2	66%
24 plus	2	0	0

In the first group the perforation had existed 6 hours or less; in the second from 7-12 hours; in the third from 13-24 hours;

and in the fourth 24 hours or more. The most important point in reviewing these statistics shows that no mortality occurred when operation was performed within the 6-hour period.

The type of surgical procedure done in the majority of these cases in this series was a simple suture of the perforation, reinforced by a tag of omentum over the perforation or if the perforation and surrounding ulcer-bearing area was large, a muscle graft was taken from the rectus muscle and sutured over the indurated and inflamed area. Thompson² states that the type of surgical procedure has a direct bearing on mortality. In 148 cases, when in simple closure; that is, without sutures of a tag of omentum over the perforation was employed, the mortality was 34.4 per cent. In this connection it is important to note that in 242 cases wherein a tag of omentum was sutured over the perforation the mortality fell off 10 per cent.

The following table shows the type of operation employed:

TABLE 3

OPERATIVE PROCEDURES

Operation	No. Cases	No. Deaths	Mortality
Simple closure	31	3	.97%
Excision closure	2	0	0
Gastro-enterostomy	2	1	50%
Pyloroplasty	1	0	0

TABLE 4

COMPLICATIONS THAT WERE ENCOUNTERED

Hemorrhage	2
Generalized Peritonitis	7
Pneumonia	3
Evisceration	2
Subphrenic Abscess	1
Psychosis	1

Frequently these patients were admitted to the Marietta Hospital in a poor condition, in a state of shock, with cold, clammy skin, weak pulse, and low blood pressure. While the operating room was being prepared, they were typed and matched for transfusions, given large doses of morphine, stimulants and glucose, and saline intravenously. During the operation they frequently received a blood transfusion. No death occurred on the operating table and

the majority of the patients left the operating room in better condition than when they entered. In the majority of cases where gross soiling of the peritoneal cavity had occurred, no drainage was employed, the abdomen was cleansed by use of suction and sulfanilamide powder was instilled into the abdomen and pelvis.

Postoperative treatment consisted of nothing by mouth for 24 hours, morphine freely, fluids intravenously, blood transfusions when indicated, and on earlier appearance of the signs of shock, and while the patient was in good condition and not moribund. On the second day a half-ounce of sterile water was given every hour and the continuance of intravenous fluids. If signs of distention occurred a Levine tube was inserted in the stomach. The patient was carefully watched for signs of infection and given large doses of sulfadiazine orally and intravenously. Two thousand cc. of 10 per cent glucose were given daily. On the third day an ounce of sterile water was given every hour. On the fourth day small amounts of strained cereal, orange juice, and cooked custard were given, and water freely. On the fifth day a first-stage Sippy diet was started.

The anesthesia chiefly used in this series of cases was nitrous oxide and ether, and spinal. It is my opinion that the anesthetic of choice is spinal. Chest complications are as common as when ether is used, but spinal gives a greater relaxation and provides the best possible operating conditions.

From this analysis of the results of the treatment of 36 patients with acute perforations of peptic ulcer several conclusions may be drawn:

1. The mortality rate is lower (approximately 11 per cent) than is generally reported because the majority of these patients were seen early and the majority were operated on within 6 hours.

2. Mortality is lowest when operation is performed within 6 hours, when no drainage is employed, when the operation consists of suture of a tag of omentum over the closed perforation, and when multiple blood transfusions are employed.

3. In cases of perforated peptic ulcer, where purulent peritonitis is present, the instillation of sulfanilamide or sulfathiazole powder into the abdomen reduces the mortality.

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ACUTE INTESTINAL OBSTRUCTION

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Macon

Another problem of great importance in the recognition and treatment of acute abdominal emergencies is that of acute intestinal obstruction. The number of deaths which occurs from acute intestinal obstruction is approximately half that of acute appendicitis so that its recognition and early submission of the patient to operation is almost as important as in acute appendicitis. In spite of the great advances in the understanding and treatment of this condition, there has been very little change in its mortality in the past ten years which is a striking example of the philosophy of "too little and too late."

The essential features of acute intestinal obstruction are abdominal pain, vomiting, and failure to pass gas and feces. In glancing at various cases, we are confronted with three types of obstruction: First, there are mechanical obstructions which are due to strictures, adhesive bands and kinks, hernias, volvulus, intussusception, and developmental errors. The second class of intestinal obstructions is due to nervous imbalance and infection and in this class are found paralytic ileus, spastic obstruction, and peritonitis. The third type is vascular obstruction and in this class we find mesenteric thrombosis and embolism.

From the point of view of pathologic division, essentially two types of intestinal obstructions are found; namely, simple and

strangulation obstructions. The former includes all cases in which blockage of the continuity of the bowel exists, and in strangulation there is the added factor of compromise of the blood supply. In the former, the wall of the bowel is pink, red, or dusky; and in the latter, it is cyanotic or black.

In looking at the reaction which occurs in the intestine as a result of obstruction, we find that the proximal loop dilates above the obstruction and then distention works upward. Gradually paralysis replaces peristalsis and the vessels of the bowel are obliterated by pressure. The contents flow backward into the stomach and vomiting ensues.

The cardinal symptoms of acute intestinal obstruction are pain, vomiting; and later, distention. The pain manifests itself as intestinal cramps and colic which begin slowly and rise to a crescendo at intervals of several minutes. It is of the utmost importance to realize that symptoms of cramping and abdominal pain, associated with nausea and vomiting and accompanied by constipation, in a large number of instances mean intestinal obstruction.

In the early stages of the disease, the appearance of the patient is good, even deceptively so. The temperature, pulse, and respiration all are normal and there is no tenderness or distention of the abdomen. One of the physical findings which I should like to emphasize is the importance of auscultation of the abdomen. At the beginning of obstruction, we find that peristalsis is almost continuous, loud, and high pitched. A few hours later it is still active but the intestinal musculature is becoming fatigued. After twelve hours peristalsis is considerably diminished and intermittent. Then interference with the circulation begins, peristalsis ceases, and paralysis sets in. As long as peristalsis is heard, the bowel is not completely devitalized and the chances for recovery by operation are good. The more active the peristalsis before operation, the better the chances are for recovery. One author states that with sufficient experience in auscultation one can predict with accuracy the conditions and color of the bowel which will be found at operation. If peris-

talsis is active and loud, the section of intestine involved will be congested and red or pink; if faint and intermittent, it will be purple; and if peristalsis is entirely absent, it will be black. Tenderness and distension are late symptoms and are evidence of peritoneal irritation by blood plasma which has seeped through the wall of the gut when strangulation sets in.

In turning to the laboratory for aid in diagnosis, we find the roentgen examination can be of much value. A flat plate of the abdomen with the patient in the supine position shows distended coils of gut clearly and will frequently localize the quadrant of the abdomen in which the obstruction has occurred. No opaque medium is necessary or permissible in acute intestinal obstruction below the pylorus. Fever, leukocytosis, and changes in the blood chemistry are late findings and are evidence of dehydration, loss of chlorides, and peritoneal irritation.

The diagnosis of acute intestinal obstruction can frequently be made from the history of a former operation or the presence of a hernia or the physical findings. Pain, cramps, active peristalsis, and constipation are very suggestive and, when accompanied by tenderness, evidence of fluid in the abdomen, fever, distention, and leukocytosis, there is the added evidence of strangulation. The factors which contribute to delay in the diagnosis of acute intestinal obstruction are failure to understand and interpret symptoms and physical findings.

Another important factor is the mistrust which is so often placed in bubbles of gas and feces obtained from enemas. This one factor has been responsible for failure to give many cases the benefit of early operation which naturally offers them the best chance of recovery. Another factor is the abuse of morphine which masks the symptoms.

In glancing for a moment at the effects of intestinal obstruction upon the organism, we find that due to excessive dehydration there is a loss of sodium chloride and the formation of toxic substances. A high obstruction is more fatal than a low one, and a strangulated obstruction more fatal than a simple one.

The prognosis in intestinal obstruction is still not a very bright one. Including all types, there is still a mortality of from 40 to 60 per cent and this is entirely too high in this enlightened day.

The treatment of intestinal obstruction naturally depends upon the type with which one is dealing. The treatment of mechanical obstruction is obviously operative, but this treatment must be supported by vital preparatory measures. In simple early cases, immediate operation with release of the obstructive agent is indicated and these patients are usually in such good condition that very little preoperative treatment is necessary. In more advanced cases, before the patient is submitted to operative interference it is necessary to replace the fluid balance and the chloride loss by intravenous saline and glucose. The stomach should be kept empty by Wangensteen's suction siphonage through a nasal duodenal catheter both preoperatively and postoperatively. Blood transfusion is indicated in serious cases. As an aid in overcoming distention the use of oxygen is a valuable ally as this dilutes the nitrogen in the swallowed air and permits its absorption through the wall of the gut. In late cases, which are poor operative risks, the use of the Miller-Abbott tube has proven invaluable when someone familiar with its technic is at hand, and the technical difficulties of its induction can be overcome.

There are usually two types of operative procedure employed in the treatment of intestinal obstruction. One is a direct attack on the obstructing mechanism with the reestablishment of intestinal continuity. This may be done with release of an adhesive band or may necessitate excision of a segment of intestine. When intestinal resection is necessary, it may be done in one or two stages. If the patient's condition is desperate, it is probably best to do a simple exteriorization of the involved segment followed by subsequent anastomosis by sutures. If this is not feasible, a short circuit anastomosis may be done around the obstruction. Probably the best and safest type of intestinal anastomosis is a lateral one, but, if it can be done satisfactorily, an end-

to-end anastomosis in the small intestine is ideal.

The second or indirect method of attack consists in establishing an external vent for drainage proximal to the obstruction by the use of enterostomy or colostomy. Naturally, these procedures are substitute ones and are usually used in cases where the patient's condition will not warrant further surgery; but it is surprising to find how often after an enterostomy has been done and the intestinal current diverted and the inflammation is allowed to subside that no further surgery is necessary.

Summary

Acute intestinal obstruction is still one of our surgical problems and its mortality rate is entirely too high. It is felt that a more careful diagnostic study and a more prompt operative interference would materially improve this and prevent the needless sacrifice of life in many of these cases. It should be remembered by the rank and file of the profession that abdominal cramps accompanied by nausea and obstipation, in a large number of cases, mean intestinal obstruction, and that delay and temporizing are dangerous and have no place in the care of such patients. The plea is made for a better understanding and more careful management of acute intestinal obstruction.

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DISCUSSION OF SYMPOSIUM ON ACUTE SURGICAL PROBLEMS IN THE ABDOMEN

Dr. Chas. H. Watt (Thomasville): I am sure after these five excellent papers that there should be plenty of discussion, and because of the time limit I am going to limit my few remarks to the last paper of Dr. Richardson on "Acute Intestinal Obstruction."

For the past twenty-five years or more there has been a great deal of experimental work done to determine the cause of toxemia and death in cases of acute intestinal obstruction. Most of these experiments have been directed towards fluid loss, ion concentration or plasma loss, etc., but the question is still not definitely settled. We know that all of these contribute to the cause, but we also know that under normal conditions there are sufficient toxic substances contained in the intestinal tract, were they permitted to gain access to the circulation, to cause death.

Now in cases of intestinal obstruction with distention

and strangulation, there is trauma to the mucosa and toxic substances gain access to the circulation, consequently in the treatment of these cases, in addition to first supplying the loss of fluids by the use of intravenous glucose, saline or plasma, as pointed out by Dr. Richardson, the next attack should be upon the relieving of this distention and, of course, the earlier these cases are brought to the attention of the surgeon or hospital, the sooner this can be relieved.

We have, as mentioned by Dr. Richardson, two types: the simple type and the strangulated type. The rub comes, as a rule, in my experience at least, in knowing just what type one is dealing with, the simple or the strangulated type, and as we know, the attack is entirely different. If one has a strangulated hernia, for instance, there is no question about what to do, but if the strangulation is entirely intra-abdominal, to me it is a different picture. If there is peritoneal irritation, in the absence of an abdominal scar and palpable tumor, then one is no doubt dealing with a strangulated obstruction and temporary measures in those cases do no good at all. In other words, there is no point in using a Levine or Miller-Abbott tube in this type obstruction. If there is any doubt at all as to the type of obstruction—and we may have even in the presence of an abdominal scar indicating former operation—this doesn't necessarily mean a simple obstruction—it may mean strangulation—consequently, if there is a question of doubt in one's mind as to the type, it seems to me that the safest thing to do is an exploration. It may be safer to do an enterostomy. If the patient's condition will not permit more than that, that is the thing to do. If one, proposing to do an enterostomy, finds bloody fluid, I think he is justified in believing that he is dealing with a strangulation and it may be necessary and probably advisable to continue the operation to explore and relieve the obstruction if possible. A very helpful thing in such cases is the aseptic enterostomy, such as devised by Wangenstein, to relieve the distended bowel, which enables one to make the attack more easily upon the cause of the strangulation.

There is one thing I should like to mention, too, in regard to the treatment, and that is in connection with anesthesia. If a general anesthetic is used, by all means keep a tube in the stomach. When one handles the intestines the contents are pumped into the stomach and through the esophagus and may be aspirated with disastrous consequences. The tube in the stomach will carry the contents away very readily.

I think Dr. Richardson's statistics are a bit high, from what recent reports show. Minneapolis hospitals recently reported 110 cases of acute intestinal obstruction in which they report 15.5 per cent mortality. Their results were brought about by conservative treatment, and they have no hesitation about resorting to an enterostomy when necessary.

Dr. S. D. Brown (Royston): I want to say just a few words about Dr. Hagood's paper on "Treatment of Perforated Gastric Ulcers." I have not had so much experience in that line of work, but of the 68 cases I have had, two were females, and 66 were males. The statistics, I believe, are that about 20 to 25 per cent of these cases

are more or less fatal, and there is no doubt in my mind that the disease is distinctly on the increase.

I believe that in this condition—while the cause is not yet established—infection plays a great part. In my opinion, it has in the cases that I have operated on, and particularly those infections about the mouth and gallbladder. Invariably in a few cases I have found it necessary to employ a dentist to extract anywhere from half a dozen, and in one case some twenty teeth. Some of those teeth were so loose and so infected it was possible to remove some of them with your finger.

Of the two females that I had, one of them was the first patient I ever operated on in 1913. She had had an ulcer for a considerable period of time, and then it perforated. I think that every man that undertakes to treat peptic ulcers medically should bear in mind that he is treating a most likely candidate for perforation, for about 20 per cent of them do so. Therefore, your patient should be instructed as to the symptoms and possibilities of perforation and he should be so well coached that if he does develop these tragic symptoms, which come on so suddenly, he should immediately hasten to the hospital, or to a doctor, and have the condition diagnosed. That is very necessary since it is altogether a question of time as to how these patients are going to progress. Those that are operated on early, as Dr. Hagood so ably pointed out, have a fine opportunity to recover, whereas those that are operated on late have not, in proportion to the time that has elapsed from the time of the perforation to the time of operation.

Recently I operated on an old gentleman sixty-eight years old, on whom I operated about three years ago, for a perforation of the posterior wall of the stomach. One of the best x-ray men that I know of made the mistake—and I make more than anybody in the world—of giving a dose of barium 48 hours after the perforation and even 24 hours later when I got him and opened his abdomen I found a peritonitis and looked for the perforation. I could not find it and then opened up the lesser peritoneal cavity and was able to bail out with my hands about a pint of his barium, and then excised the ulcer and, with closure and drainage, he got well after some three months.

Four weeks ago I operated on that same man and again he waited 48 hours before presenting himself for treatment, and this time it was a portion of the duodenum that was perforated!

Dr. A. Hamblin Letton (Atlanta) Closing: In writing this paper we have been astounded with our own statistics. Little did we realize that almost 5 per cent of our patients with ruptured appendices had a white count less than 10,000; nor that in 9 of our cases the appendix had ruptured before the illness was 24 hours old. In fact, 3 ruptured in the first 11 hours of the illness; that 5.3 per cent of our patients had no nausea or vomiting while 15.9 per cent had only nausea; that the taking of laxatives more than doubled the death rate (7.35 to 16.2 per cent). Our real thrill came, however, when we noticed the effect the sulfa drugs used in the abdomen had on the hospital stay and the mortality. In these

hectic days when hospital beds and manpower days are needed so frantically, sulfa drugs helped us cut the average hospital stay from 18.8 to 12.9 days, or a saving of about six days—six days another patient can have that hospital bed; six days less bill for the patient to pay and six days less that patients ultimately have to stay away from work. Without the use of sulfa drugs our death rate from peritonitis and its sequelae was 8.5 per cent, but using sulfa drug we did not lose a patient from peritonitis or its sequelae.

I think a word should be said about how to use the sulfa drug in the abdomen. We have tried both the powder and the crystals and have found the crystals are far better than the powder—the latter tends to cake forming a foreign body. The crystals should be sprinkled under the cecum, then around it, and finally on top. The sprinkling should be done in such a manner that there is no piling up of crystals in any one place. If there is much peritonitis some crystals should be placed on a spatula (a Crile ribbon retractor is very nice for this) and sprinkled around while holding upward on the abdominal wall. As the different layers are closed a small amount of crystals should be sprinkled evenly on each, care being taken not to leave crystals between the skin edges for this may delay union a day or so.

I should like to bring to your attention these conclusions, some of which Dr. Davison mentioned.

1. All patients do not present the cardinal signs and symptoms of appendicitis although they may have perforative appendicitis.

2. The use of laxatives more than doubles the mortality rate.

3. Sulfonamide drugs in the abdomen alone, or in conjunction with the postoperative administration of the same or another sulfonamide, reduced the morbidity by a sizeable degree and made death from peritonitis following ruptured appendices rare.

4. Too much sulfonamide may save a patient from peritonitis yet cause his death by its toxic effects.

5. The sulfonamides have another danger. Some physicians, and some laymen, may in the future delay operation believing that if perforation occurs the sulfonamide will save the day. There is still only one way to avert deaths from ruptured appendices and that is not to let them rupture.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

The 1944 Fund-Raising Appeal of The National Foundation for Infantile Paralysis gets under way today throughout the United States and continues through January 31.

Basil O'Connor, president of the National Foundation, in announcing the official opening of the appeal, pointed out that during 1943 this nation suffered its third worst epidemic of infantile paralysis in the recorded history of the disease in the United States.

"No one can tell what 1944 will bring, but we do know that many of the 12,500 victims stricken in 1943 are still receiving treatment and some will require care for years to come," said Mr. O'Connor. "That means there is a very great continuing need which the Founda-

tion—wholly owned and maintained by the American people—must fill.

"We must not fail in this great endeavor. Americans throughout the world are jeopardizing their ability to walk so that the children of this nation may continue to walk in freedom. American men and women are facing the horrors of war—and aren't running—so that tomorrow's youngsters may run with the freedom of healthy and happy children. We've never had a better time or reason to ask for the dimes that make dreams come true."

The celebration of President Roosevelt's birthday, January 30, will be more widespread than ever before, since dances, card parties and other special activities are being planned at various posts of United States Armed Forces throughout the world.

"On the health front at home the President's birthday will be celebrated by dances, concerts, card and theatre parties, sports events and other fund-raising activities to storm the ramparts of the children's arch enemy with a nation-wide bombardment of dollars and dimes," Mr. O'Connor added.

PHYSICAL DEFECTS

What are the implications of waivers for known physical defects which physicians sign upon being appointed for limited service in the Army Medical Corps?

The answer to this recurrent question is clarified in a recent opinion on the subject by the Office of The Judge Advocate General of the Army. The opinion, released by the Procurement and Assignment Service of the War Manpower Commission, is as follows:

Response is made to your oral inquiry whether acknowledgment, on the accompanying form, of existing physical defects would preclude a person from thereafter claiming benefits to which he would otherwise be entitled on account of the service connected aggravation of such defects. As to the defects acknowledged, the execution of such an instrument merely provides additional evidence of their existence, and to that extent would operate to preclude the person involved from thereafter claiming benefits on account of them. It is the opinion of this office, however, that the mentioned form does not support to be a waiver of possible future benefits to which the individual might become entitled by reason of any service-connected aggravation of such defects, and would not operate to deprive the individual of any possible benefits on account of such aggravation.

Since Nov. 1, 1942, no resident of Winnipeg, Manitoba, has had to pay for tuberculosis treatment. In adopting this policy the City Council was influenced by the desirability of segregating all potential sources of infection, the fact that the cost of treating tuberculosis is ruinous to the average family and that financial pressure frequently interferes with the patients' chances of recovery. Another factor was the difficulty experienced in securing payment of hospital bills. Bulletin, Canadian Tuberculosis Association, March, 1943.

THE PRESIDENT'S PAGE

We have begun the work of another year — 1944.

While many of our members are serving with our government agencies in various parts of the world — with the Army, the Navy and the Public Health Service — those of us who are left at home *must* carry on. We *must* work as never before, not only to win the war but to preserve all that has been near and dear to us as Americans, and as physicians.

Plans are under way now to hold the Ninety-Fifth Annual Session of the Medical Association of Georgia. What a privilege it is to be a member of this Association, and what a privilege it will be to meet again and carry on the work which was begun by our distinguished forbears almost one hundred years ago. The annual session will be held at the Hotel DeSoto, Savannah, May 9-12, 1944. Hotel reservations should be made now.

All members, and other physicians as well, who desire to participate in the Scientific Program of this annual session should send titles of their papers to Dr. Edgar D. Shanks, Secretary-Treasurer, 478 Peachtree Street, N. E., Atlanta, at once. The Committee on Scientific Work will meet early in February to make up the program. *Do not delay.*

With every good wish for the New Year.

W. A. SELMAN, M.D.

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OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

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JANUARY, 1944

MEDICAL LAWS

Excellent progress was made during 1943 in the enactment by state legislatures of premarital, prenatal, prostitution and venereal disease control laws and amendments. Dr. Walter Clarke, Executive Director of the American Social Hygiene Association, said in announcing the results of a legislative survey completed by the Association's Division of Legal and Protective Services.

"These various laws have the purposes," Dr. Clarke said, "either of protecting mothers and babies against syphilis, of enabling communities to take effective steps in the repression of prostitution, or of facilitating the finding, reporting, treatment and quarantine of infectious venereal diseases. It is encouraging that such solid progress has been made in this field even in the midst of war. Experience has proved that such legislation is an essential factor in maintaining a sound, smoothly functioning venereal disease control program."

The Association's survey shows that during 1943 the following social hygiene legislation was passed:

In Alabama a unique law was adopted which requires all inhabitants of the state between the ages of 14 and 50 to have an approved blood test for syphilis. An appropriation of \$75,000 was provided to carry out provisions of the law.

The states of Indiana, Nebraska, Missouri and Wyoming passed premarital examination laws requiring examination by the physician of both applicants for a married license including a blood test for syphilis as a prerequisite for a marriage license. Idaho, Georgia, Kansas and Nebraska adopted prenatal examination laws for syphilis. This means that there are now 30 states which have premarital laws for the protection of marriage from syphilis and 30 states which have prenatal laws protecting babies from syphilis. The first premarital examination law was passed in May 1935 by Connecticut and the states of New York and Rhode Island enacted the first prenatal examination laws in 1938.

Arkansas, Florida, Georgia, Oklahoma, Tennessee, Texas and West Virginia adopted new laws for the repression of prostitution, making a total of 19 states which now have adequate legislation against most of the aspects of prostitution. Ten other states have good legislation against prostitution with the exception of those

provisions concerning the activities of customers of prostitutes.

The following states strengthened their venereal disease control laws, particularly in relation to the reporting, treatment, quarantine, follow-up and findings of persons with an infectious venereal disease: Connecticut, Florida, Indiana, Maine, Maryland, Montana, New Mexico, North Dakota, Oklahoma, Oregon, Tennessee, Vermont and West Virginia.

The premarital examination laws of California, Connecticut, Illinois, Iowa, Massachusetts, and Vermont were amended by the legislatures to obtain more smooth operation. An interesting feature of the Massachusetts premarital law, as amended, permits marriage of applicants under certain conditions even though one or both may have syphilis in an infectious stage. The physician who discovers evidence of syphilis must inform both applicants to the marriage of the evidence and nature of such disease.

Two laws of special interest in this field were passed by the Florida legislature. One permits the revocation of a license of a boarding house, rooming house, hotel and restaurant for any violation of the laws against prostitution, lewdness or assignation. The second statute requires all persons rejected or deferred from military service who are infected with venereal disease to report to the venereal disease clinics operated by the Florida State Board of Health or to take treatment from a private physician or at public expense.

Oklahoma's governor recently signed a bill relating to the examination and treatment of persons confined in public or private institutions, or any person arrested by lawful warrant for vagrancy, prostitution or other sex crimes for the purpose of determining if they are infected with syphilis or gonorrhea.

MY DEAR BOY

At 16½ you say you desire to study medicine. I am glad. Perhaps I have helped you reach this decision while you were assisting me last summer during your school vacation. Actual experience is always more helpful than conversation alone.

The practice of medicine is a noble calling, is a useful occupation, and is an opportunity for unselfish service. It satisfies curiosity, stimulates unselfish desires and creates a sense of satisfaction which develops with a well spent life.

The road from high school through college and hospitals is difficult but for the most part enjoyable. The basic sciences — dry bones, origin and insertion of muscles, and the study of anatomy generally — may sometimes seem unimportant, but all subjects taught are essential. Endeavor to master each subject assigned you for it will prove useful throughout life.

The practice of medicine on human beings is

dealing with lives of fellowmen ranging from unborn babies to the departing aged. Therefore, success depends upon starting right and continuing so.

When I speak of success I am not thinking primarily of money or prestige, though a certain amount of each is desirable; but I have in mind the spending of a properly prepared balanced life used unselfishly for the good of others. Herein lies satisfaction which may be enjoyed on fleeting occasions throughout life's journey and maybe a little more fully towards the end.

After thorough preparation and two years in medical school, you will begin to use maybe in a crude way some of your knowledge under expert guidance to the benefit of both yourself and suffering patients. This will be more and more interesting, as you learn, and result in a feeling of pride in work well done. At last the great day of graduation will arrive when the right to sign M.D. after your name will be achieved.

Now comes important years of hospital practice with great leaders in the medical profession. Study well both their arts and sciences. Together they amount to the application of "the healing art," based on fairness, wisdom, justice, and mercy, which will guide you successfully through life.

When you are located in practice many difficulties will arise from which you may learn valuable lessons which come only with experience. You may think you know more than some experienced doctors, and no doubt you will about theories for one thing, but those doctors will know more than you about other questions. So learn to work with and not against your fellow practitioners. You can learn something worthwhile from all of them. By all means get the habit from the beginning of attending medical meetings. They act as helpful refresher courses useful to your patients to whom you owe the best you have to offer.

Your manner of living is very important. Daily you will advise patients how to live. Words of wisdom are important of course, but your example of correct living will influence young people more. Therefore, rest, recreation and social relations form a splendid background for work.

If you desire to specialize in some particular subject, a few years in general practice will always remind you to think of the body and mind as a whole before working out minutely the special field chosen.

Learn well the fact that many complaints are functional disorders coming from patients' minds. They may simulate any known organic diseases.

No doubt you will sometimes be confused about spiritual matters, as all men are. This is often up for consideration by doctors. Your primary duties will be treating sick bodies and disturbed minds, but this helps in developing

worthwhile attributes of our spirits which measure our permanent values. Have faith, give thanks and quietly pray for Divine guidance.

In the beginning you may wonder how you can maintain a normal body, mind, and spirit, when you contact so many diseased bodies, abnormal minds and evil spirits. Here you may realize that you really see many more healthy bodies, normal minds and noble spirits, from whom you may learn needed and helpful lessons.

Your first concern will be about your private patients and your family which is quite all right. Later you no doubt will realize that beyond this interest lies a broad field where the need is great and the opportunity for unlimited work among the needy is urgent. Here you may render unselfish service to many individuals less fortunate.

Some of this you will not understand, but it may cause you to think. It will be a pleasure to discuss any questions that may come to your mind. There are many vital to the welfare of our people.

With love from,

DADDY, M.D.

(by J. A. Redfearn, M.D.)

CARE OF WOUNDED BY ARMY-NAVY MEDICAL SERVICES EXTOLLED BY SQUIBB IN SERIES OF ADVERTISEMENTS

The bravery and skill of the Army and Navy medical services and the marvelous new drugs that are saving the lives, rehabilitating the bodies and alleviating the pain of men wounded in action are extolled in a series of advertisements in national magazines sponsored by E. R. Squibb & Sons, manufacturing chemists.

Illustrated with authentic action photos from the Army and Navy, as well as posed pictures in training hospitals, the advertisements point out that 97 out of 100 men in evacuation hospitals during the North African campaign *didn't* die, that it's 37 to 1, based on present statistics, that men wounded in Navy action won't die, and that men wounded in action often are under skilled medical care within ten minutes after they are injured.

Three reasons are given, quoting Surgeon General of the Army, for so many lives being saved — blood plasma, skillful surgery and "sulfa" drugs, in that order. Attention is called to a product newer than plasma — human serum albumin — which is made from blood given at donor centers, but is less bulky, easier to ship and use, and responsible for amazing recoveries from shock and burns.

The advertisements appear under the generic title of "Miracles of the Battlefront," and are designed to acquaint the public with the heroic work of the medical services of the Army, Navy, Coast Guard and Marines, as well as call attention to some of the life-saving, pain-relieving drugs that are being used. The advertisements were planned and prepared with the cooperation of the medical services. Six insertions, extending into 1944, are scheduled in *The Saturday Evening Post*, *Good Housekeeping*, *Life* and *Hygeia*.

GEORGIA DEPARTMENT OF PUBLIC HEALTHT. F. ABERCROMBIE, M.D., *Director***POSTWAR PLANNING FOR PUBLIC HEALTH**

Today our military accomplishments are quite evident but the dark clouds of war still hang over our horizon. However, we should feel reassured that the dawn of peace will soon bring a ray of light into our darkened world. The prospects of such should stimulate our thought to postwar planning.

The subject of postwar planning is not new to us. It is prominent today in national, state and local governments. It is of chief concern to commerce, industry and navigation. It may indeed become so popular that it may rank second only to that of a worldwide and enduring peace. We may wonder when it will take on that alphabetical conventionalism and become more familiar to us as P.W.P. Postwar planning may become so generally accepted and applied that it may be difficult to differentiate between postwar planning and normal peacetime planning. Postwar planning may become a selfish and indiscriminate planning influencing abuse of the federal proceeds of excessive taxation. However, let us hope that such may eventually come to an end and that local governments may more fully realize their own financial responsibilities and prerogatives. Be that as it may, postwar planning is here and it may be appropriate for those of us in our individual fields of endeavor to see that we are not discriminated against in a postwar planning program. But let us bear in mind reasonable postwar planning leading to worthwhile projects. We believe that public health planning is reasonable and worthy.

It is quite evident today that the trend of thought in postwar planning is directed chiefly to the purpose of re-employment. Consequently, future construction projects seem to be the criteria for postwar re-employment. We may question, however, the continuity of such employment when everything possible has been constructed. Therefore, it seems that postwar planning should go further than merely construction for the purpose of re-employment. It is quite evident that now is the time for health workers to begin postwar planning. If public health does not benefit by such planning other causes less worthy may have prior claims. Therefore, let us plan for a constructive postwar program which will stand as a permanent monument to the cause of public health.

Especially in the field of public health engineering it should not be difficult to do this. It is entirely feasible to plan sanitary projects to utilize the greatest number of unemployed and

in the same manner permanently protect the public health. To further this objective there has been established a national committee on water and sewage works development for postwar projects. This committee is engaged in promoting and assisting in planning for construction and expansion of public water and sewerage projects for postwar projects. The objective of this committee is an adequate, safe and satisfactory water supply together with sewage and trade waste treatment and disposal for every city and town possible in the United States. It seems needless to state that the Engineering Division of the Georgia Department of Public Health is active in this endeavor. It would not be consistent with good business practice to deprive the state of its just dues in finance and in health.

Safe, pure and wholesome water for domestic use is one of the great essentials for public health protection. Also water which has been utilized and wasted is one of the great dangers to the public health. We cannot separate these two utilities in planning for health protection. To protect the health of our population groups we must have these public sanitary facilities. They must be properly designed, properly constructed, properly utilized and fully appreciated. Full appreciation of such bears upon the subject of public health education. If the citizenry and local government officials were apprehensive of the grave danger existing without these facilities, promotion of such would be simple. Unfortunately a municipal structure generally meets with favor according to its aesthetic appeal. Too often the unveiling of a monument has more appeal than the turning of a valve permitting a copious flow of pure health giving water. The dedication of a city park with its fragrance of shrubs and flowers is more elegant and can stimulate more eloquence than placing into service a new modern and indispensable disposal plant. Thus it is unfortunate that many intangible factors in public health are not fully appreciated by the public. Therefore, it is evident that there is an urgent need for more public health education in order to stimulate more appreciation by the public of the value of sanitation. Public health education is a necessary prelude to public health planning. Let us begin to educate the public so that we may plan for the postwar period. Let us be prepared.

It is quite evident that this nation has been guilty of procrastination in planning for unforeseen emergencies. We were unprepared for the serious economic depression and had done little planning previous to it. We were unprepared for the military disaster which prompted the familiar slogan "Remember Pearl Harbor." Experience

is a great teacher and we should take advantage of it.

Perhaps with the dawn of peace we will be better prepared to meet a new transitional period. Experience during the economic depression prompted serious thought in planning for future emergencies and led to very constructive action. One constructive result was establishment by the President of the United States of a national agency designated as the National Resources Committee. The purpose of this committee was planning for projects with the dual objectives of providing for re-employment and development of our natural resources. Quite prominent as members of this committee were public health engineers with the various state health departments. The program included planning for water uses involving studies of streams for future public water supplies, sewage and trade waste disposal, drainage for malaria control, flood control, hydroelectric development and many other projects of public health benefit. This agency though now at least temporarily defunct has compiled much data which will evidently be of value in postwar planning for public health.

The work accomplished in the prewar period by the National Resources Committee and the work now under way by the committee on water and sewage works development for postwar projects should certainly augment to a great extent postwar planning for public health.

Postwar planning for public health may include much in both administration and construction. Administrative phases may include organization for rendering of public health service. Construction may include such as public health centers for rendering local public health service as well as planning for sanatoria, hospitals, and institutions. It seems that local public health service has advanced out of proportion to adequate office facilities for local health administration. Many local health offices are below the professional dignity of the professions represented in the field of public health. Quite often the office of the local health commissioner is in one of most inferior rooms to be found in the local county court house. Consequently, the service does not always demand the confidence and respect due it from the general public and local officials. The lack of aesthetic and commodious quarters for a local health department may often deter the establishment of such a department. A commissioner of health may be judged by his official environment. Then is not this an appropriate time to plan for postwar public health centers. Should we not take advantage of such opportunity, we may expect jails, court houses, and other buildings to receive prior consideration.

In postwar planning for public health we have grave concern about the future supply of public health workers. Our losses of physicians, engineers, and nurses for military service have been

great. If many of these will again be available for public health service is a question of grave concern. It is quite probable that when the war clouds have lifted this democracy will probably, at least for a time, police and rehabilitate many parts of the world. If so, it is inevitable that public health will be a prime factor in rehabilitation. Many public health workers who have been called into military service may be retained for foreign service in public health. We are familiar with the phrase that the United States is the arsenal of democracy. May we not anticipate that in the postwar period the United States will temporarily at least be an arsenal of manpower for a world wide public health program. We have heard much about the Atlantic Charter. It is not yet developed in operation but it may include public health protection as one of the freedoms of democracy. If so, we may be engaged in worldwide planning in addition to local, state, and national planning. Today we are rendering public health service to the United States. Tomorrow we may be rendering public health service to the United Nations. Then let us give more constructive thought to postwar planning for public health.

L. M. CLARKSON, *Director*

Division of Public Health Engineering.

MONOGRAPH ON LYMPHOGRANULOMA VENEREUM

Noteworthy contributions to the detection and differential diagnosis of lymphogranuloma venereum are those of Rake, McKee and Shaffer, who have cultivated the agent in the yolk sac of the embryonated chicken's egg and obtained concentrated suspensions of elementary bodies. In this manner a highly purified and specific antigen, known as Lygranum S. T. has been prepared which is rapidly supplanting antigens prepared from either human pus or mouse brain. These workers alone, and in collaboration with Dr. A. W. Grace, have used the yolk sac antigen for the complement-fixation testing of serum suspectedly infected patients. The specificity and sensitivity of this antigen (Lygranum C. F.) provides an additional means of detecting early cases of lymphogranuloma venereum.

In the course of investigations involving these tests, there accumulated at the Squibb Institute for Medical Research a considerable mass of information concerning the properties of the causative agent, the epidemiology and clinical aspects of the disease. To facilitate the work of investigators and teachers in this field, and perhaps to encourage the interest of potential investigators, practicing physicians and health officers, it was decided to compile and publish the information at hand. The result is a 32-page publication entitled *Lymphogranuloma Venereum*—a Monograph. The value of the book is enhanced by maps, charts and numerous illustrations in color.

The Monograph is available gratis to physicians and to public health officials, and will be a valuable addition to medical college libraries. Those who request copies should enclose their professional card or use their professional letterhead.

WOMAN'S AUXILIARY

President—Mrs. Olin S. Cofer, 948 Lullwater Road, Atlanta.

President-Elect—Mrs. W. T. Randolph, Winder.

First Vice-President—Mrs. Ralph Fowler, Marietta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Richard Binion, Milledgeville.

Recording Secretary—Mrs. Chas. Usher, 6 East Liberty St., Savannah.

: OFFICERS 1943-44

Corresponding Secretary—Mrs. H. H. Askew, 1329 Springdale Road, Atlanta.

Treasurer—Mrs. Lucius N. Todd, Rural Delivery No. 2, Augusta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. J. Harry Rogers, 1325 Peachtree St., N.E., Atlanta.

MEMBERSHIP NOTICE

In the roster of officers and members of the Woman's Auxiliary published in the December, 1943, issue of *THE JOURNAL* names designated with a star (*) were presidents of county auxiliaries and district managers and were not "Honorary Life Members" as indicated by a footnote. The only honorary life member is Mrs. W. W. Battey, Sr., Augusta.

HEALTH EDUCATION

Mrs. Ralph Fowler, of Marietta, first vice-president and chairman of health education of the Woman's Auxiliary to the Medical Association of Georgia, writes interestingly to members on the health program of the group.

Our aim is the continuance of a constructive health education program through the co-ordinated efforts of public relations, visual education and health education committees, thereby furthering the war effort as well as elevating the health status of our state and nation for the present and posterity. It has been suggested that the Georgia auxiliary could be of valuable assistance in the state health program, first by helping set up a county health planning committee in each county; and second, by working with this council in cooperation with other organizations on health problems, health education and child guidance, thereby avoiding overlapping efforts of the health committees of various organizations. The president of each county auxiliary should be on this council.

There is a dire need for auxiliaries to organize and sponsor nutrition classes in the seven critical war areas of the state where people are living under crowded, inadequate conditions. These are Savannah, Augusta, Macon, Columbus, Atlanta, Brunswick and Albany. The officials of the big companies employing these masses have agreed to cooperate in helping to organize these classes in nutrition and will provide community centers for the meetings. This is a wonderful opportunity for our auxiliaries to do a worthwhile piece of work. Contact Miss Mary Emma Barnes, State

Department of Health, Atlanta, for further information. The tubercular hospital at Alto needs recreational facilities, library funds, books and magazines, and old toys and children's books.

To further health education, make a definite study of your county's health problems and needs, its health administration and health laws; promote health education program in and through all organizations possible; each member should be active on health and nutrition committees in various organizations; arrange for and show as many health films as possible, recording same for permanent record for future reference; distribute health literature and magazines; and assist in any phase of war work pertaining to the health and well-being of our people."

PUBLIC RELATIONS

Mrs. Wallace Bazemore, of Macon, chairman of public relations for the Woman's Auxiliary to the Medical Association of Georgia, has the following interesting suggestions for public relations to the chairmen of this important phase of work in each Auxiliary.

In this year of continued war, the public relations in the state and county auxiliaries shall continue to serve the medical organizations and each county chairman in her own community, remembering that we must have the approval of the advisory committee. Choose the parts of the following program best fitted to serve your community:

"Promote health education among lay groups. Promote interest in the American Medical Association radio broadcast, in the sale and distribution of *Hygeia*, the only magazine on health published by the A.M.A. Promote interest in the subscription of the *Bulletin of the Woman's Auxiliary to the American Medical Association*. Cooperate in all forms of War Service-Red Cross, Civilian Defense, AWVS, Blood donations and purchase of War Bonds. Familiarize members of the Auxiliary and lay groups with the achievements of American medicine, past and present, and interpret the aims of American medicine for the future. Help with plans for the advancement of maternal care and child health and welfare. Assist families of doctors in Army centers. Extend the privileges of the auxiliaries to the wives

of doctors in service, invite them to become associate members. Stress the need for education in auxiliary matters among our own members, in order that they in turn influence others with whom they may come in contact as they work in their various organizations.

"I would like to suggest that every community organize a planning council and divide the work of health education among the various groups, P.-T. A.'s might concentrate on nutrition and school lunches, schools and churches on child guidance, and women's clubs on recreational activities."

FULTON COUNTY

The Woman's Auxiliary to the Fulton County Medical Society has held two recent interesting meetings. At the November meeting, recommendations were read from the executive board regretfully accepting the resignation of Mrs. William Milas Dunn as president, with Mrs. J. Harry Rogers, first vice-president, succeeding to the presidency and Mrs. O. H. Matthews becoming first vice-president. Mrs. Rogers made a short talk, expressing her pride in becoming the auxiliary's president and urging the cooperation of each member in an effort to make this a most successful year. The feature of the program was a talk by Mrs. Olin S. Cofer, president of the Woman's Auxiliary to the Medical Association of Georgia, who gave the highlights of the year's program. Mrs. B. L. Shackelford and her committee served luncheon later.

The December meeting took the form of a large rally, at which several hundred P.-T. A. leaders were guests. Dr. Paul W. Chapman, dean of the College of Agriculture at the University of Georgia and a lecturer and author of national note, spoke on "Food Fights for Freedom" and Miss Lorna Barber, who is head of nutrition for the southeastern area of the American Red Cross, gave some interesting suggestions along nutritional lines. Mrs. Rogers, president, presided and Mrs. Eustace A. Allen, of Atlanta, first vice-president of the Woman's Auxiliary to the American Medical Assn., introduced the speakers. Mrs. Jeff Richardson, chairman of health education, arranged the program and Mrs. W. A. Selman had charge of the luncheon following the meeting.

RICHMOND COUNTY

Major Guptill, of the Oliver General Hospital, spoke on "Chest Infections in Civilian and Army Life" at a recent meeting of the Woman's Auxiliary to the Richmond County Medical Society, held at the home of Mrs. Lucius Todd in Augusta with Mrs. A. P. Bridges and Mrs. F. N. Harrison as co-hostesses. Mrs. Robert E. Leonard, president, presided and introduced Major Guptill. Miss Florence Collins, director of the Women's USO unit, spoke on the program being presented for Army wives and enlisted women in Augusta. The Auxiliary voted to sponsor a health program for the public, with a talk by Dr. Nathan

M. DeVaughn, assistant professor of medicine at the University of Georgia School of Medicine, and the showing of a health film. A social hour followed the business meeting.

RANDOLPH-TERRELL

The Woman's Auxiliary to the Randolph-Terrell Medical Society held its first meeting of the fiscal year recently at the home of Mrs. J. C. Patterson in Cuthbert, the president, Mrs. Leonard Rush Massengale, presiding. Mrs. A. R. Sims, exhibit chairman, showed the poster exhibited at the state convention. The poster, depicting the year's work, won applause. Mrs. Massengale, past scrapbook chairman, showed the scrapbook, which won the Bonar White prize for the best scrapbook exhibited at the state convention. After business, a social period was enjoyed.

The Randolph-Terrell Auxiliary held a recent meeting at the home of Mrs. W. G. Elliott in Cuthbert, Mrs. Massengale, president, presiding. Mrs. Massengale announced committee chairmen, whose plans for the year were approved. Members pledged their cooperation in all auxiliary efforts. Mrs. A. R. Sims, chairman of year book and program, presented an interesting program on the life of Jane Todd Crawford.

FIFTH DISTRICT

The Woman's Auxiliary to the Fifth District Medical Society held its semi-annual meeting at the Academy of Medicine in Atlanta recently, Mrs. Don Cathcart, manager, presiding. New officers elected are Mrs. Shelley Davis, manager; Mrs. Frank Boland, Sr., vice-manager; and Mrs. Harvey Hamff, secretary. Mrs. Olin S. Cofer, president of the Woman's Auxiliary to the Medical Association of Georgia, talked most interestingly on the auxiliary program for the year. Mrs. J. C. Blalock discussed the Wagner-Murray-Dingell bill. Mrs. Eustace A. Allen, first vice-president of the Woman's Auxiliary to the American Medical Association, brought some interesting ideas from the national group. Prior to the business meeting, the auxiliary members enjoyed a delightful buffet supper with members of the Fifth District Medical Society.

ACUTE SHORTAGE OF DOCTORS IS FEARED

Signs indicate that the doctor shortage will grow more acute than ever, *The Journal of the American Medical Association* said recently.

On the basis of a survey by the U. S. Public Health Service, the War Manpower Commission, the Federal Works Agency, and the Procurement and Assignment Service, it is stated that the armed forces have commissioned only slightly more than 80 per cent of their stated needs.

In addition, 80 per cent, or about 1,500 of the annual doctor output of the medical schools will be absorbed into service.

Even if the 1,500 remained and went into civilian practice, they would replace not more than half of the 2,500 to 3,000 doctors who die every year.

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse: Headquarters, 131 Forrest Ave., N. E., Atlanta. Phone Walnut 8911; residence, Vernon 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone Walnut 8911; residence, Jackson 7979.

THE SUPERVISED PRACTICE PERIOD FOR SENIOR CADET NURSES

(Excerpts from Nursing Education in Wartime, December, 1943 "Underlying Premises.")

The supervised practice period is based upon the following premises:

1. That an accelerated program is in operation and that the basic instruction and experience required by the school will have been completed prior to the supervised practice period;
2. That, while nursing service is the primary objective during this period, the plan will provide for the development of the educational values inherent in the experience from the practical standpoint;
3. That good standards of supervision, of working, and of living and recreational conditions will be maintained during the supervised practice period;
4. That schools will make assignments in the light of current nursing service needs but that students, with faculty advice, will have the opportunity to indicate the experience in which they would like practice;
5. That only in case of a serious emergency or a great need will students be made available for services other than those included in the plan made for the student in advance;
6. That the experience during the supervised practice period is in accord with the general requirements of the school for graduation and that it meets with the approval of the state board of nurse examiners.

Supervised Practice Period A Part of the Curriculum

The supervised practice period is a part of the total curriculum. A good plan for the period will consider in detail the accelerated portion of the curriculum and will build upon the knowledge and skills which it is the purpose of the total curriculum to develop. The plan may add a new type of experience and instruction or it may provide experience to strengthen those clinical courses which necessarily have been shortened in the acceleration process. A good plan

will also capitalize the special abilities and interests already demonstrated by the student.

Summarizing Statement

The supervised practice period, whether for senior cadet or non-cadet students, represents an adjustment in the program made necessary by the war and, as such, it should be recognized. While schools of nursing will doubtless give consideration to the preferences of their students, the purpose of the period will not be served unless students are assigned where their services are most needed. But even though service is the primary objective, the supervised practice period presupposes continued educational guidance and offers the opportunity for continued educational growth.

NURSING DIVISION, PROCUREMENT AND ASSIGNMENT SERVICE

(Excerpts from a release in The American Journal of Nursing, October, 1943).

The functions of the Nursing Division of the Procurement and Assignment Service of the War Manpower Commission are:

1. To consider the nursing needs of the armed forces and establish a quota for each state to meet these needs.
2. To determine the availability for military service or essentiality for civilian service of all nurses eligible for military service and submit such determinations to the American Red Cross for use in procurement of nurses for the armed forces.

3. To insure the maximum utilization of all members of the profession.

4. To maintain a complete roster of the nursing profession.

5. To carry out these functions through state offices and local committees in accordance with policies and recommendations made by the Directing Board.

NOTE: Each of Georgia's fourteen District Nursing Councils for War Service has its Committee on Procurement and Assignment already making classifications of nurses in the districts according to their availability for military service or essentiality to the positions they hold. The State Committee reviews the decisions and notifies each nurse of her classification.

COUNTY SOCIETIES REPORTING FOR 1944

Georgia Medical Society

(Chatham County)

The Georgia Medical Society (Chatham County) announces the following officers for 1944:

President—E. J. Whelan, Savannah
 President-Elect—G. L. Touchton, Savannah
 Vice-President—W. V. Long, Savannah
 Secretary-Treasurer—S. Elliott Wilson, Savannah
 Delegate—Ruskin King, Savannah
 Delegate—J. L. Elliott—Savannah
 Alternate Delegate—J. W. Daniel, Jr., Savannah
 Alternate Delegate—H. T. Exley, Savannah

Floyd County Medical Society

The Floyd County Medical Society announces the following officers for 1944:

President—O. W. Jenkins, Lindale
 Vice-President—G. W. Holmes Cheney, Rome
 Secretary-Treasurer—Inman Smith, Rome
 Delegate—Harry Dawson, Shannon
 Alternate Delegate—R. C. Maddox, Rome

Thomas County Medical Society

The Thomas County Medical Society announces the following officers for 1944:

President—Herbert F. Readling, Thomasville
 Vice-President—J. N. Isler, Meigs
 Secretary-Treasurer—Mary J. Erickson, Thomasville

Walker-Catoosa-Dade Counties Medical Society

The Walker-Catoosa-Dade Counties Medical Society announces the following officers for 1944:

President—F. L. O'Connor, Rossville
 Vice-President—D. W. Hammond, LaFayette
 Secretary-Treasurer—P. M. Golley, LaFayette
 Delegate—Fred H. Simonton, Chickamauga
 Alternate Delegate—S. B. Kitchens, LaFayette

Newton County Medical Society

The Newton County Medical Society announces the following officers for 1944:

President—S. L. Waites, Covington
 Secretary-Treasurer—W. D. Travis, Covington

Bulloch-Candler-Evans Counties Medical Society

The Bulloch-Candler-Evans Counties Medical Society announces the following officers for 1944:

President—R. L. Kennedy, Metter
 Secretary-Treasurer—W. E. Simmons, Metter

Bibb County Medical Society

The Bibb County Medical Society announces the following officers for 1944:

President—A. M. Phillips, Macon
 President-Elect—J. B. Kay, Byron
 Vice-President—W. W. Baxley, Macon
 Secretary-Treasurer—R. W. Edenfield, Macon
 Delegate—A. M. Phillips, Macon
 Delegate—J. A. Fountain, Macon
 Alternate Delegate—W. W. Chrisman, Macon
 Alternate Delegate—H. G. Weaver, Macon

Habersham County Medical Society

The Habersham County Medical Society announces the following officers for 1944:

President—J. B. Jackson, Clarkesville
 Vice-President—Bruce Swain, Clarkesville
 Secretary-Treasurer—T. H. Brabson, Cornelia
 Delegate—D. H. Garrison, Clarkesville
 Alternate Delegate—O. N. Harden, Cornelia

Ware County Medical Society

The Ware County Medical Society announces the following officers for 1944:

President—J. E. Penland, Waycross
 Vice-President—W. P. Stoner, Waycross
 Secretary-Treasurer—Kenneth McCullough, Waycross
 Delegate—W. F. Reavis, Waycross
 Alternate Delegate—J. R. Gay, Homerville

Dougherty County Medical Society

The Dougherty County Medical Society announces the following officers for 1944:

President—Phil E. Roberson, Albany
 Vice-President—J. A. Redfearn, Albany
 Secretary-Treasurer—I. M. Lucas, Albany
 Delegate—Phil E. Roberson, Albany
 Alternate Delegate—I. M. Lucas, Albany

Clayton-Fayette Counties Medical Society

The Clayton-Fayette Counties Medical Society announces the following officers for 1944:

President—J. R. Wallis, Lovejoy
 Secretary-Treasurer—T. J. Busey, Fayetteville

Bartow County Medical Society

The Bartow County Medical Society announces the following officers for 1944:

President—S. M. Howell, Cartersville
 Vice-President—W. E. Wofford, Cartersville
 Secretary-Treasurer—A. L. Horton, Cartersville
 Delegate—W. E. Wofford, Cartersville

Floyd County Medical Society

The Floyd County Medical Society announces the following officers for 1944:

President—Oliver Jenkins, Lindale
 Vice-President—G. W. H. Cheney, Rome
 Secretary-Treasurer—Inman Smith, Rome
 Delegate—Harry Dawson, Shannon
 Alternate Delegate—R. C. Maddox, Rome

When a state fails to provide sufficient beds for tuberculosis patients it is committed to a plan that is wasteful, ineffective, and in the long run costly. Tuberculosis is curtailed but little, if at all, by treating only a small percentage of the patients and leaving many open cases in the community to sow the seed for another crop of victims who in their turn will be needing care. If we admit only the advanced cases to give them terminal care, we leave in the homes the hopeful cases until they in turn need terminal care. Halfway measures will not exterminate tuberculosis. A sanatorium bed should be available for every case of active tuberculosis regardless of the stage of the disease. Treatment that will benefit the patient and also serve to shield others by protecting them from infection is the real objective of case finding.—*The Modern Attack on T.B.*, by Henry D. Chadwick, M.D., and Alton S. Pope, M.D.

NEWS ITEMS

Members of the Medical Association of Georgia who were recently elected to fellowship in the American College of Surgeons were as follows: Doctors C. A. Andrews, Jr., Canton; Rudolph Bell, Thomasville; Ira Ferguson, Atlanta; Wm. H. Good, Jr., Toccoa; Murl M. Hagood, Marietta; O. D. Lennard, Sandersville; Wm. E. Mayher, Columbus; John T. McCall, Jr., Rome; H. M. McKemie, Albany; S. D. Murray, Newnan; J. Elliott Scarbrough, Jr., Emory University; Harry E. Talmadge, Athens; and A. K. Temples, Augusta.

Dr. G. Lombard Kelly, Augusta, dean of the University of Georgia School of Medicine, has been granted a six-months' leave of absence by the Chancellor and Regents in the University System in order to take over duties as executive secretary of the Council on Medical Service and Public Relations of the American Medical Association.

Dr. James E. Paullin, Atlanta, professor of clinical medicine of Emory University School of Medicine and president of the American Medical Association, delivered the graduation address to the 50 members of the senior class of Emory University School of Medicine in Glenn Memorial Auditorium December 20.

Dr. Roy R. Kracke, Emory University, professor of pathology of Emory University School of Medicine, spoke before a meeting of the Macon Hospital staff November 23.

Dr. Bruce Swain, formerly of Dahlonega, has moved to Clarksville and opened a clinic in the "Charm House."

The Georgia Pediatric Society held its Eleventh Annual Meeting at the Biltmore Hotel, Atlanta, December 8. Dr. Roy R. Kracke, Emory University, spoke on "Diagnosis of Hemorrhage Diseases"; Dr. L. Emmet Holt, Baltimore, spoke on "Hypoglycemia in Childhood"; Dr. Wm. Platt, Emory University, "Tropical Diseases"; and Dr. Charles Church, E. R. Squibb & Sons Laboratories, "Penicillin and Infection."

The staff of Emory University Hospital met January 4. Dr. Tully Blalock demonstrated a case of "Muscular Dystrophy"; Dr. Lon Grove reported three cases of "Surgery in Chronic Ulcerative Colitis."

The Bibb County Medical Society met January 4. The Aurex Macon Company entertained the members at dinner.

The Fulton County Medical Society held its Anniversary Meeting and Banquet at the Druid Hills Golf Club January 6. The program for the Anniversary Meeting was: Call to Order by the President, Installation of Officers, Inaugural Address by the President; Announcement of the Committees; Miscellaneous Business; and Adjournment.

The January 6, 1944, issue of The Fulton County Medical Society published the "Address of the Retiring

President," Dr. George W. Fuller; "Annual Report of the Board of Trustees" by its chairman, Calhoun McDougal; "Report of Judicial Council" by the chairman, Dr. Roy R. Kracke.

OBITUARY

Dr. William Albert Sibbett, Douglas; member; Atlanta School of Medicine, Atlanta, 1910; aged 58; died December 7, 1943, in the Veterans' Hospital, Atlanta, after a long illness. He was a native of Appling County. Dr. Sibbett began his professional career doing work for sawmills in the vicinity of Douglas, then he took post-graduate study at New Orleans, then in New York. Later he limited his work to diseases of the eye, ear, nose and throat. Dr. Sibbett served in the medical corps of the U. S. Army during World War I. Since that time he has been active as a member of the Coffee County Medical Society, American Medical Association, American Legion, F. & A. M. Surviving him are his widow, two sons, Lieut. W. A. Sibbett, Jr., U. S. Army in California; Pvt. J. R. Sibbett, Gainesville, Fla. Rev. E. M. Claytor and Rev. Earle J. Garbutt officiated at the funeral service conducted at the home.

Dr. Louie P. Tessier, Augusta; University of Georgia School of Medicine, Augusta, 1896; aged 71; died November 22, 1943, at his home on Hickman Road. He was a native of Richmond County and spent his life there. Dr. Tessier took an active interest in affairs of Augusta and Richmond County. He was a member of the St. John Methodist Church. Surviving him are his widow, one son, Dr. Claude E. Tessier, Augusta; one daughter, Mrs. Birnie Johnson, of New Jersey. Rev. Paul A. Turner officiated at the funeral services conducted at the home. Burial was in Westover Memorial Park Cemetery, Augusta.

Dr. William Milas Dunn, Atlanta; member; Johns Hopkins University School of Medicine, Baltimore, Md., 1911; aged 62; died January 4, 1944, at the Veterans' Hospital No. 43, Atlanta. He was born in Lancaster, S. C. He served as lieutenant in the Navy during World War I. After the war, he began the practice of medicine in Atlanta and was surgeon for the Western Union Telegraph Company for 23 years. Dr. Dunn was a member of the Fulton County Medical Society, American Medical Association and F. and A. M. Surviving him are his widow, one daughter, Miss Clara Elizabeth Dunn, Raleigh, N. C.; one son, Midshipman William Robert Dunn, Atlanta. Rev. Wm. V. Gardner officiated at the funeral services conducted at the First Presbyterian Church. Burial was in West View Cemetery.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

SHOULD VITAMIN D BE GIVEN ONLY TO INFANTS?

Vitamin D has been so successful in preventing rickets during infancy that there has been little emphasis on continuing its use after the second year.

But now a careful histologic study has been made which reveals a startling high incidence of rickets in children 2 to 14 years old. Follis, Jackson, Eliot, and Park* report that postmortem examination of 230 children of this age group showed the total prevalence of rickets to be 46.5 per cent.

Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, *Am. J. Dis. Child.* 66:11, July 1943.

CLINICAL CURARE: INTOCOSTRIN

Since time immemorial South American Indians have smeared curare on the tips of blow-gun darts to paralyze game in hunting. The drug is prepared by native witch doctors as an infusion of the bark and stems of certain plants, particularly from a liana or vine, *Chondrodendron tomentosum*.

Having access to the largest quantity of useful curare ever gathered, the Research Laboratories of E. R. Squibb & Sons have developed methods for the preparation of a highly uniform, physiologically standardized, highly stable and sterile aqueous extract. This preparation is known as Intocosttrin. Each cubic centimeter is adjusted by comparative tests on healthy rabbits to conform to the equivalent of 20 mg. per cc. of a standard drug, the important ingredient of which has been iso-

lated in crystalline form and identified as d-tubocurarine.

Intocosttrin, given intravenously or intramuscularly, exhibits the typical action of pure curare, that is, interruption of the nerve impulse at the neuromuscular junction with resulting paresis or relaxation of voluntary muscle. The drug acts within a minute or two after injection; the effect lasts about 15 to 30 minutes, disappearing rapidly as the drug is eliminated. Intocosttrin has little effect on the circulation and none on the sensory nerves. It is inactive by mouth.

Intocosttrin has been the subject of extensive laboratory and clinical investigation during the past three years. It has been described as indispensable in preventing traumatic complications which not infrequently accompany convulsive shock therapy of mental disease. Over 40,000 injections of Intocosttrin have been given for this purpose, and its use extends the benefits of such therapy to patients who otherwise would be unable to obtain its benefits.

The preparation has been used in spastic children, its lissive action being prolonged by intramuscular injection and permitting physical therapy and muscle training, under favorable conditions. Prior to its availability no comparable treatment for these disorders was known.

In certain other resistant spastic disorders of the nervous system, the intravenous or intramuscular injection of Intocosttrin may give sufficient relief from painful spasm so that the drug can be recommended for this purpose alone. Another interesting use of Intocosttrin is as a diagnostic agent in the differential diagnosis of myasthenia gravis. A small fraction of the average adult dose produces profound exaggeration of symptoms in a myasthenic patient. The test is strongly positive even where the opposite prostigmine test is indefinite.

Other uses for Intocosttrin, based upon its property of inducing muscular relaxation, have been proposed. Some have been tried clinically to a limited extent, but



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wise, if you are an Atlanta doctor, you will find the Atlanta Biltmore an ideal place to meet or to lunch—a refreshing retreat from the noise and confusion of the business district.

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must be considered "experimental" pending confirmation. Whatever may be the outcome of these other potential applications, Intocostin provides one of the most important single advances in the shock therapy of mental disease, a new means for helping many congenitally disabled children in their endeavor to attain normal muscular function, and a new tool in the diagnosis of myasthenia gravis. It has shown itself safe when given in proper dosage, properly administered with full appreciation of its physiologic characteristics.

WANTED

Laboratory and x-ray technician, adequate salary and full maintenance. Write complete particulars regarding training and experience. Address Dr. X.

WANTED

TWO PHYSICIANS—Graduate Class A medical school, for Milledgeville State Hospital, Milledgeville, Georgia. Address inquiries to Dr. Y. H. Yarbrough, Superintendent.



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SYMPOSIUM ON OBSTETRICS AND GYNECOLOGY

RURAL OBSTETRICS ASSOCIATED WITH OFFICE DELIVERY

RICHARD TORPIN, M.D.

Augusta

JAMES B. KAY, M.D.

Byron

JOHN T. PERSALL, M.D.

McRae

The object of this paper is the presentation of the advantages of office delivery of obstetric patients in rural areas and to offer it as a possible competitor of the many procedures now in vogue, a few of which are as follows: (1) Home delivery of which there are several types; (a) by midwife; (b) by physician without much equipment; (c) by physician with sterile outfit similar to a hospital set-up, and (d) by physician with a private or a public health nurse assistant. (2) Hospitalization in a nearby town or city.

In the State of Georgia¹ of the 60,000 births per year, midwives deliver approximately 40 per cent, and probably physicians deliver an equal number all done in the home. Most of the remainder are hospitalized in neighboring towns and cities and delivered by physicians.

In South Carolina² a somewhat higher per cent is delivered by midwives in the home. Hemschemeyer³ says 10 per cent of all babies in America are delivered by midwives, usually ignorant and poorly trained. Bloss⁴ states that 65.63 per cent of total obstetric practice of the physicians of the Southern Medical Association is carried on in the homes of the patients. Therefore, probably twenty to twenty-five thou-

sand deliveries in Georgia are conducted in homes by physicians. If a small sample is any indication, most of these physicians carry very meager equipment. Lack of sterile gowns and sheets may be associated with first class sterile technic, if the procedure is carried out as described by Buxbaum,⁵ and Tucker and Benaron⁶ from DeLee's Maternity Center in Chicago. They call this "intensive aseptic technic," and it includes proper sterilization of the operator's hands and the patient's shaved perineum. They do not drape the patient, but they do wear wet boiled sterile gloves. Delivery is conducted with the patient in bed unless operative procedures are done; then on the kitchen table. A few physicians carry equipment that approximates that of the usual hospital delivery room, and such a technic is well described by Bloss,⁴ and by Hannah and others^{7,8} who use it in private home practice. Bloss reports that he is able to do considerable operative procedure safely in the home; it is the one usually attempted in home delivery services of medical schools. When a physician takes enough interest in home obstetrics to maintain a sterile technic such as either of the above, the amount of work on his part often induces him to acquire an assistant nurse, either privately employed or a county health nurse, of whom there is a growing number devoted to assisting obstetric patients prenatally and during labor. These county unit services have been well described by Lapham,⁹ and Walker and Bowerman.¹⁰

Now what are the objections to home delivery, first by midwives? In America midwives have seldom overcome the obstacles of training and assimilation into rural community life as they no doubt have successfully done in England.¹¹ Consequently,

¹Read before the Medical Association of Georgia, Atlanta, May 12, 1943.

most of them are ignorant and untrained and the same objections apply to them as to poorly trained and poorly equipped physicians attending labor in the rural homes; namely, when certain serious complications arise, neither is able to be of adequate service. There are further objections to even well trained physicians delivering in the home. In order to have good obstetric service, the mother and unborn babe should receive constant expert attention throughout labor. Such is often impossible for the physician to give, for none knows in advance of the progress of labor in any certain case. Even in a fairly well conducted home delivery maternity service connected with a medical school and all patients within two miles, an appreciable number deliver unattended. Any physician who has engaged in rural obstetrics knows only too well how labor, after hours of progress, may suddenly cease and the baby not be born for a week or so.

Rural practice of this type destroys all semblance of regular office practice as well as disrupts the home life of the physician. In fact, it is one of the unattractive aspects of the country doctor's life and probably has damaged the health of many useful practitioners. There are other objections which bear indirectly upon the fetal and maternal mortality and morbidity. These stem from the almost universal idea among relatives in attendance that not enough is being done to relieve the mother's pain, or that labor is not terminated soon enough. The physician's patience in waiting, usually the most valuable service he can give for the life and health of the mother and unborn child, is more than likely taken as a sign of indecision or of timidity in the too routine use of pituitrin or of obstetric forceps. He is urged to "do something" and too frequently makes premature attempts to deliver the fetus through an undilated cervix, and this is known to be one of the most hazardous of all operative deliveries.

A study of mortality records of pregnancy and labor^{12, 17} reveals toxemia, hemorrhage and sepsis as the three main dangers for the mother, and asphyxia and birth injury for the infant. Fortunately, in the home where few anesthetics or amnesics

have been used, the problem of apnea neonatorum is reduced. For all of these dangers there have been developed procedures which should be employed as occasion demands. However, few home deliveries are accompanied by equipment necessary for insurance against all of these things. Furthermore, a large factor is continuous observation of the mother over a period of hours or days, which is difficult in the home. While against all of these hazards protection may be quite adequate in a hospital if properly used, in the home most of them are neglected. It is a fact that the great preponderance of normal deliveries has a tendency to reduce the relative incidence of poor results in those few who have complications. Nevertheless, the mortality from these few becomes large in the statistics.

Technic of Office Delivery

The physician obtains the use of three or more rooms instead of the two for his office and reception room. In the extra rooms he fits ordinary single or hospital beds equipped with legholders, such as have been developed by Gilbert. Besides he has a steam sterilizer, or may have the use of one at a nearby hospital. He has the help of a personally trained assistant, be she nurse or secretary, who is in attendance in the daytime and he may employ another for the occasional night duty. These, in addition to maintaining the necessary sterile equipment, are taught to aid in administering the analgesic and amnesic and oxytocic or other drugs used, and in observing the progress of labor by head stethoscope and by rectal examination with the view of conserving the valuable time of the physician, who then is not tempted to hurry delivery to the detriment of the mother and child, and at the same time permits him to develop and conduct regular office visits. The assistant is available also at the actual delivery, which is the time that the most serious complications are apt to present themselves.

The delivery is conducted as follows: The patient, with shaved and thoroughly scrubbed perineum (ten minutes if time enough) is placed in stirrups across the bed, or on a nearby delivery table, if the

physician desires. When she is under the influence of barbiturates and hyoscine the delivery may be completed without further anesthetic unless an episiotomy is necessary, which may be the case in primiparas. Episiotomy operation may readily be accomplished¹⁸ after infiltration of the mesio-lateral incision line by sterile 1 per cent procaine solution. The maintenance of an aseptic technic, aided by having drapes, instruments and sutures readily available in the office under the constant care of a trained assistant, is so much easier than in the home, that once they have adopted it, few physicians would again revert to home deliveries. The mother and child are sent home by ambulance in the course of a few hours or a day or so.

An analysis of statistics reveals that the main causes of maternal death, in or following labor are:^{12,17} (a) puerperal infection; (b) postpartum hemorrhage; (c) placenta previa; and (d) premature separation of the normally implanted placenta, with a few due to laceration of the cervix or rupture of the uterus. Equipment to anticipate and combat each of these complications, although rarely necessary, is relatively easy to maintain available in sterile condition at all times in the office, but is very seldom taken to home deliveries.

In reference to infection, prevention by careful aseptic technic, avoidance of vaginal examinations, and correct suture of lacerations are usually so effective that sepsis has become less and less a factor in well conducted maternities.

The treatment of postpartum hemorrhage is in large measure prophylactic, holding the uterus to prevent relaxation during the two hours following delivery, administration of oxytocics and pituitary preparations and ergonovine; and spontaneous labor if possible, rather than operative. The active treatment consists in further employment of these procedures and packing of the uterus, which is the only effective method in severe hemorrhage; and this should be done far more often than it is. In Georgia in the past ten years, an average of 40.5 women a year died of postpartum hemorrhage.¹³ The reason for infrequent pack-

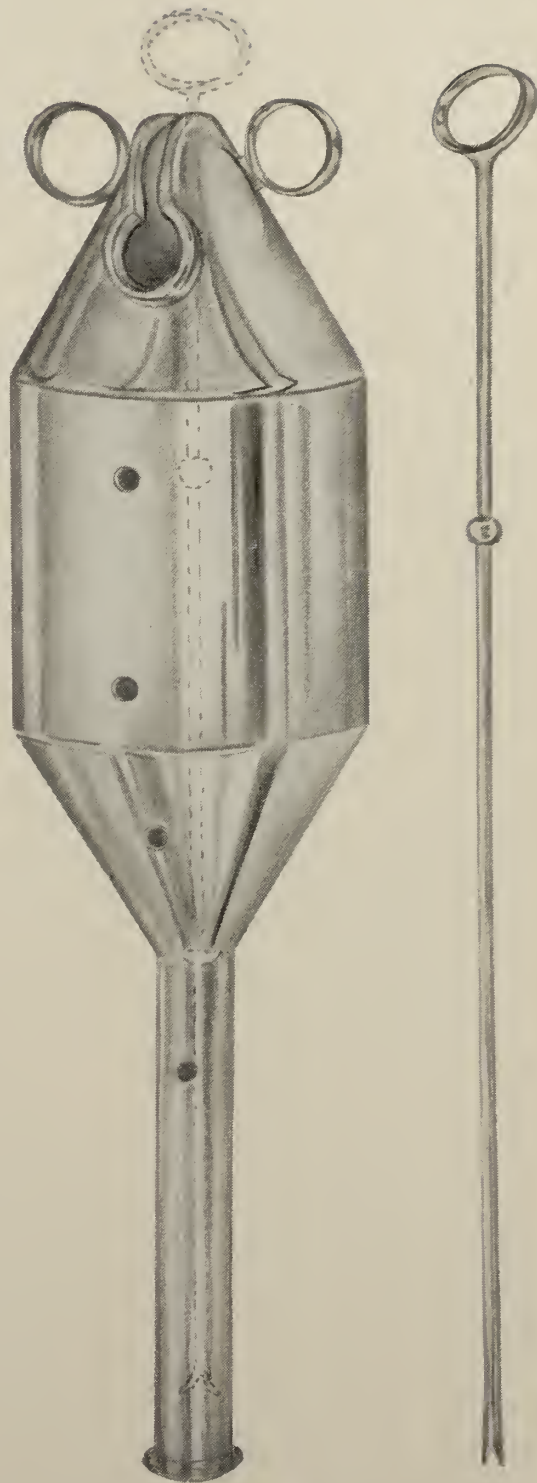


FIGURE 1

"Automatic" uterine packer is loaded and sterilized for immediate use in case of post-partum hemorrhage.

ing of the uterus is technical and this has been largely overcome by use of an automatic uterine packer kept loaded and sterile for employment at a moment's notice. At the University Hospital in Augusta, this device (see figure 1) has been used successfully by several obstetricians in approximately a hundred patients, none of whom became infected.

The treatment of placenta praevia (excepting that of placenta praevia centralis, which is so exceedingly rare as to be largely discounted) is fortunately usually the same as that of premature separation of the normally implanted placenta, and that is simple rupture of the membranes under sterile technic and application of a tight abdominal binder.

Blood transfusion in both of the aforementioned conditions is always in order and is far easier done in the office than in the home.

Cervical laceration, extremely rare in the practice of conservative obstetricians, demands suture of the rent which may be anterior, posterior or lateral, and if in the last named location, it may extend through some of the larger arteries. The first hemostatic suture, under good exposure, should be placed above the apex of the tear. Rupture of the uterus, fortunately rare in good obstetric practice, demands hospital care where hysterectomy usually is necessary.

Apnea neonatorum is simply and efficiently managed by introduction of a tracheal catheter and administration of air or oxygen. This is easily accomplished by use of an electric-lighted infant laryngoscope and a modified Flagg insufflator, devised at the University Hospital (figure 2). Air is administered directly to the infant's lungs when the operator blows upon the mouth-piece of the instrument, attached to the intratracheal catheter. A weighted pop-valve allows enough air to inflate the lungs adequately, but releases excess pressure thereby preventing rupture of lung alveoli.

From the foregoing review of the technic, equipment and assistance necessarily available at all times, it is evident that these can be obtainable for every case if delivered in the physician's office (including modern

methods of blood transfusion): not so well as in a hospital, but far better than in the home and at no more expense but at much less cost than in a hospital. It is here suggested that the governmental agencies might do well to investigate further the possibilities and, instead of attempting to train at best incompetent midwives, rather to employ rural physicians to administer prenatal care, delivery and postnatal care in their offices. The cost would perhaps be far less, and at the same time the obstetric care would be in the hands of the only one available and capable of managing all possible complications. In addition, it would be an added inducement for better trained physicians to practice in the rural communities where their services are so much needed.

Report of Cases

One of us (J. B. K.) practicing in a town with a population of 305, fifteen miles from Macon, reports as follows:

1. Number of years of office deliveries: 12.
2. Approximate number of patients per year: 95 to 100.
3. Mortality rate: 1 patient in past 12 years.
4. Morbidity rates: 10 per cent. Those with temperature of 100° or more 24 hours after delivery.
5. Complications: Three pelvic abscesses, all cleared up without operation. One cesarean in 24 years of practice, none in past 12 years; about 1 per cent forceps deliveries; premature separation of placenta with loss of baby — 4 cases; one severe postpartum hemorrhage; no patient has developed pneumonia postpartum. None has developed breast abscesses until after dismissed. Quite a few cases of pyuria which were not cleared up until after delivery.
6. Amount of and training nurses, office assistants, etc.: Two graduate nurses. One has had postgraduate work in obstetrics. One nurse on day duty, other on night duty.
7. Set-up, rooms, equipment, beds, instruments, sterilizers, sterile drapes used, preparation of patients, etc.: Three rooms, three beds, the average equipment including forceps, Kelly pads, stirrups and instruments for repair work. Each patient is required to bring her own linen. Rochester steam sterilizer and Castle instrument sterilizer. Drape with sheets. Upon admission, patient is given S-S enema and shaved. The nurse takes blood pressure and makes rectal examination and doctor is called only when some abnormality is found or shortly before delivery, if patient is admitted at night. Eclampsia and pre-eclampsia treated with standard routine of magnesium sulphate intravenously, intramuscularly and by mouth, sedatives, narcotics and glucose. No vaginals done by the doctor or the nurse unless there is some definite indication like a hemorrhage, or stopped labor, and the trouble

cannot be determined by rectal examination and then the patient is moved to the operating room, cleaned up with green soap, painted with 4 per cent mercurochrome and a vaginal injection made.

8. Provision made for Negro women: One small room where very few colored women are delivered. Most of these have been complicated cases that the midwife could not handle; 2 or 3 per cent of 1200 cases delivered in the office have been colored.
9. Number delivered on way to office: None; 3 delivered in car just before admitted.
10. Anesthesia used: Chloroform and ether. Nembutal, seconal, delvinal and, occasionally, pantapone.
11. Do the women like it and what per cent have second and following deliveries this way? Ninety-five per cent of the patients come back for following deliveries.
12. What per cent of all available patients make use of office delivery? Ninety-five per cent of the white patients and a very small per cent of the colored.
13. How soon are they sent home? From 6 to 24 hours. The nurse or doctor goes to see them daily or every other day, as indicated, until baby's cord is off; lactation is established and breasts are all right.
14. What are the objections? An old idea prevails among some people that they should not be moved for several days after delivery, but in this immediate community there are very few objectors.
15. Do the ambulance people like it and cooperate? No ambulance is used except with very large patients who are too heavy to be handled in a car. Two Buick sedans are used, both of which are arranged so that the back of the front seat on the right of the driver can easily be removed and specially built mattress put in, thereby making a very comfortable ambulance of same.

One of us (J. T. P.), who has practiced in a town of 1,314 in South Georgia, reports:

1. I have had $2\frac{1}{2}$ years of office deliveries.
2. About 60 cases per year—150 in all, 9 in February last, and averaging 75 per year now.
3. Mortality rate:
 - A. Infant—2.
 1. Pelvis-fetus disproportion, delivered $3\frac{1}{2}$ pound baby with forceps—stillborn.
 2. $7\frac{1}{2}$ months' induced labor in 17-year-old mother who was a morphine addict. Baby lived 7 hours.
 - B. Maternal—none.
4. Morbidity rate has been very low in puerperium.
 - A. Two cases of abscess of tooth, one on third day and one on twelfth day, which developed lobar pneumonia with a stormy recovery.
 - B. Septic sore throat is common due to influx of visitors when patient returns home.
 - C. One case, thought at first to be puerperal sepsis, cleared up in 48 hours with quinine treatment.

Morbidity as characterized by fever and rapid pulse is negligible.

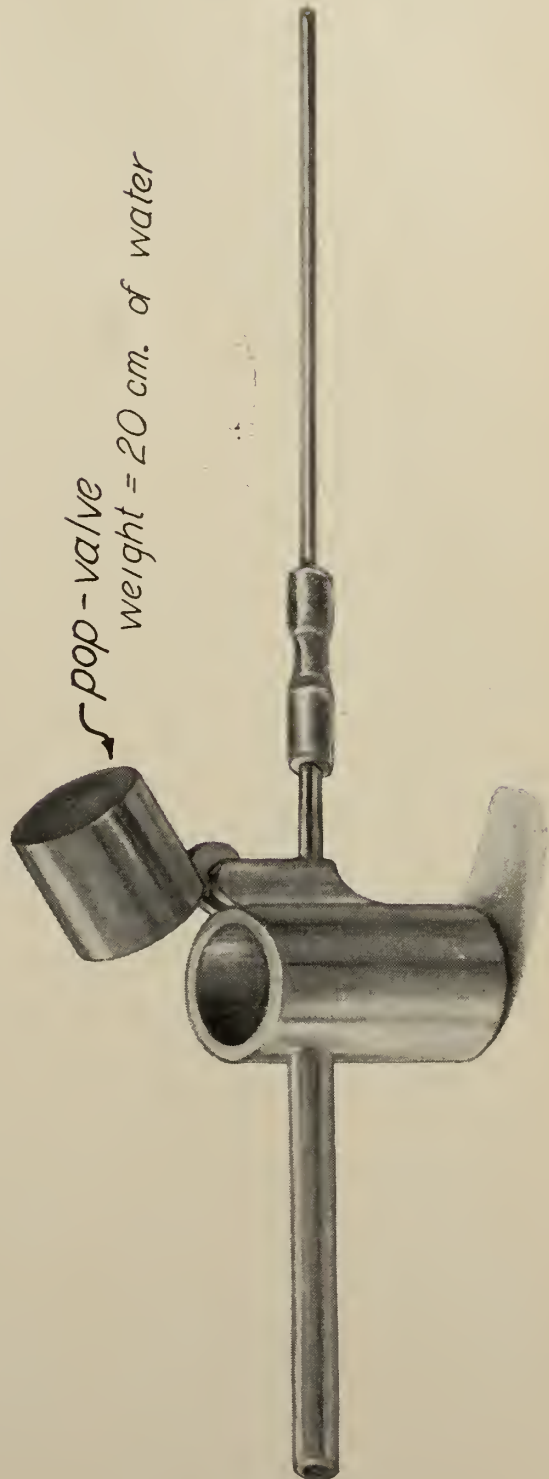


FIGURE 2

Insufflator with tracheal catheter. With pop valve closed only enough pressure to inflate the lungs of the newborn can be introduced, obviating danger of hyperinflation with rupture of the lungs.

5. Complications:

A. Predelivery and at delivery.

Three cases of failure of cervix to dilate.

1. First case placenta separated prematurely, baby dead on examination. Bag inserted and spontaneous delivery followed with macerated baby.

2. Second case, fetal heart rate dropped from 140 to 70. Cesarean performed, 8½ pound baby.

3. Third case, low-lying placenta with head displaced out of inlet. Hard pains with no progress. Bag inserted and after full dilatation of cervix internal version done with breech extraction. Normal baby.

One case of eclampsia after long delivery. Eleven cases of hypertension and nephritis. Three cases occipitoposterior delivering as such.

Eight cases uterine hemorrhage (5 light and 3 severe). Uterine pack used immediately in each case.

Six cases of breech at term, turned and delivered as occipital presentations.

Few perineal tears—frequent episiotomies.

B. Postdelivery: No milk leg as yet.

Frequent septic sore throats.

Two cases breast abscess; one incised, one treated with sulfathiazole, no incision.

All episiotomies and tears are given rubber ear syringe and aqueous metaphen or merthiolate and instructed to instill 2 drams every 4 hours. Results good.

6. Two graduate nurses, one nurse with two years in a hospital, one with two years in a nursing hospital, and one with six months' training in my office. All have been satisfactory. Usually have only one assistant, and she does not scrub.

7. Delivery room 12 x 16 feet with bed, Valentine genito-urinary table for delivery. Table has knee crutches and shoulder stops. Sink in same room. Pressure-cooker type of sterilizer for packs; 10" x 20" x 6" copper sterilizer for instruments. Bedside table with elevated top, resembles and serves as Mayo instrument stand, leaving other to place baby on. Two hospital adjustable beds. University Hospital routine used in enemas, shaving and scrubbing, painting and spraying. University Hospital pattern drapes made and used routinely. Fluids from ice box before delivery and food ordered from cafe when hungry after delivery.

8. No provision at all for Negro women due to lack of space for expansion of facilities. New office and clinic to be opened soon. Shall try to get Rosenwald Foundation to sponsor present set-up for Negroes, if possible.

9. None delivered on way to clinic. Greatest distance traveled 30 miles.

10. Due to use of gas for heating, no ether used. Few drops of chloroform to slow pains if needed while placing patient on table. Few drops given by nurse at time of crowning. For suturing: local procaine used, eliminating need of dangerous chloroform. Seconal, 4½ gr., scopolamine 1/150,

pitocin following delivery. Ergotrate for 10 doses. Vitamin K for 3 weeks prior to delivery, and by hypodermic injection if patient has not taken same by mouth.

11. The patients like it very much; 10 cases now are repeaters. So far as I know none has gone elsewhere for a second child.

12. Unable to determine percentage of Negro deliveries, since many whites and 99 per cent Negroes use midwives. Of the doctors here, I deliver a little better than one-third of the women delivered by the four of us.

13. An occasional husband or grandmother objects. This is usually where there have been several labors already and labor is not considered seriously. Many of these change. Just had a patient with toxemia of pregnancy, heart disease, etc. brought to me after attempted forceps in the home. The father was 72 years old. His wife had had 18 previous labors, all in the home. He said, after the nineteenth, that never again in the home—the clinic was the place. Mothers have no objections; they like it.

14. Sent home 12 to 24 hours after delivery. If baby is born by sun-up, mother may go home by sun-down; if later, they spend the night.

15. Ambulance people cooperate. They have never charged over \$10 for maximum distance of 30 miles.

In many hospitals in certain sections of the United States, obstetric patients are kept for ten days, almost as a rule. Theoretically this hospital convalescence has been considered ideal. However, it has been shown by McCord¹⁶ and others that there is little danger in transporting the mother and child home much sooner. McCord, in a personal communication, writes: "We send normal cases home in an ambulance anywhere from twelve to seventy-two hours after delivery, all depending on how crowded we are at the time. This has been our practice from necessity for many years. I am not prepared to give an accurate statement as to just what happens to these women when they get home. Practically no follow-up is done on them. However, should they get into difficulty, our ward is the only refuge they have and we do hear from them. It is my guess that we readmit about 35 cases per year out of approximately 2500 delivered. From June 1941 to the present time, of the 5014 women discharged, as mentioned above, we have in our cross-index 7 instances of thrombophlebitis. However, I do not for a moment believe that this is the true incidence, and there are probably many cases that we never hear from. There is one great advantage in getting patients home

early, and that is the absence of cross-infection in the ward and nursery."

At the University Hospital, Augusta, a somewhat similar procedure has been in use for many years, i.e., the normally convalescing patients are sent home in an ambulance at the third or fourth day, usually the latter. In the past six years, with approximately 1,000 labors per year, the incidence of complications developing after four days has been almost negligible. In the past year there has been one case of thrombophlebitis on record. She was readmitted and recovered under treatment by lumbo-sympathetic nerve block.

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WARN OF MALARIA DANGER AMONG THOSE RETURNING FROM TROPICS

Pointing out that certain types of malaria, such as falciparum, may be difficult to recognize due to the wide variety of symptoms, Harry Most, M.D., and Henry E. Meleney, M.D., New York, warn in *The Journal of the American Medical Association* for January 8 that "Every passenger and crew member of an airplane returning from a malarious region should be instructed to obtain medical attention on the first development of any symptoms of illness, even those of a common cold. . . . Every patient returning from the tropics should have a thick and thin blood smear examined for malarial parasites, and if negative this should be repeated every twelve to twenty-four hours until malaria is confirmed or excluded. . . ."

CONTINUOUS CAUDAL ANALGESIA IN NORMAL AND COMPLICATED LABOR

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Augusta

Caudal analgesia was first introduced by Fernand Cathelin in 1902.¹ In 1909 Stoecel² reported the use of this technic in obstetrics. Hingson and Edwards³ recently have adopted a continuous technic for caudal analgesia which is similar to Lemmon's⁴ method of continuous spinal anesthesia.

In order to properly evaluate continuous caudal analgesia in obstetrics, for our own purpose we have employed the technic in a small series of 52 cases.

We were primarily interested in establishing: (1) Which of the anesthetic agents was to be preferred; (2) indications and contraindications; and (3) the effect of the technic on normal progress of labor.

We employed both novocain and mety-caine, in 1 and 1.5 per cent solutions.

Technic

We employed Labot's classic technic of introducing the needle into the caudal canal. This technic has been employed by us on numerous occasions in the past for perineal and rectal surgery. The armamentarium employed was simply what has always been used by us for caudal analgesia with a few simple additions to adapt it for continuous analgesia. Steel rigid spinal needles of 18 gauge were employed in all patients. With proper care there need be no broken needles. We have not broken any up until now and have employed rigid spinal needles in hundreds of patients for caudal blocks.

The patient was placed in the prone position with a large pillow under the thighs. When the injection was completed the patient was placed on her side and changed

Read before the Medical Association of Georgia, Atlanta, May 12, 1943.

from side-to-side as she desired. When she was ready to be placed on her back on the delivery table, the caudal needle was protected by placing a U-shaped inflated rubber cushion under the buttocks.

Results

Both white and colored private and charity patients were employed in this study of 52 cases. Five additional cases were complete failures. In two of the latter group the failure was due to the needle being outside of the caudal canal. In three of these individuals the needle was in the proper place but no analgesia developed due to an error in the concentration of the anesthetic agent employed (0.15 per cent metycaine was prepared by mistake by the supply room instead of the usual 1.5 per cent solution.)

There were 34 primiparas, of whom 24 obtained complete relief of pain. In the other 10 patients pain relief was 75 per cent or better. There were 18 multiparas in the group. Twelve of these were completely relieved of pain and in 6 the pain relief was 75 per cent or better, but not absolutely complete. All of the primiparas had prophylactic episiotomies repaired with no additional anesthetic agents required.

Included in the above group were: 1 craniotomy; 2 toxemias; 4 breech deliveries; 6 outlet forceps (all in the primipara group); 1 twin delivery; 1 placenta previa; and 1 premature separation of the placenta (7th month of gestation).

There were 4 infant deaths. Three babies were stillborn, 1 was dead before the caudal analgesia was induced; 1 had a prolapse of the cord following a bag insertion for the induction of labor and 1 died just prior to delivery (premature separation of the placenta). One baby lived 40 minutes following delivery and it was found to have a congenital bivalvular heart at postmortem.

Only one of the babies in the series was born apneic and was revived with endotracheal insufflation of air, lived for 40 minutes (the baby with bivalve heart). All of the other babies born alive breathed spontaneously, and most of them either immediately or within a few seconds of birth. Six of the babies were meconium-stained

but showed no distress either in utero or at birth.

There were no maternal deaths. Two of the mothers developed infections at the site of the caudal injection. One of these had the needle in situ and developed a staphylococcus infection which was treated with x-ray and sulfathiazole and drained spontaneously through the needle tract. The other infection followed numerous attempts at putting the needle in the caudal canal. This infection was treated with x-ray and resolved without incision and drainage. The area was very painful and tender for about 10 days. The patient was extremely sensitive to sulfa drugs, and their administration had to be discontinued after a few hours.

Nausea and vomiting occurred in about one-fourth of the cases during the caudal analgesia.

There were no respiratory or circulatory complications of mothers in this series.

Intra-uterine pressure studies were carried out in four patients of this group. This was done by the method previously described and reported by Woodbury, Hamilton and Torpin in 1937.

Comments and Summary

1. Whether the patient be either primipara or multipara, labor pains should be well established as to frequency and duration before the caudal analgesia is begun.

2. The area of injection should be cleansed thoroughly before and after the analgesia. It is advisable to cover the skin puncture with collodion at the end of the procedure in order to minimize the possibility of infection.

3. Skin analgesia need not be above the perineum to insure complete relief of pain during the first and early second stage of labor.

4. If pain relief is not complete within 20 minutes after a total injection of 30 cc. of either 1 or 1.5 per cent of the local anesthetic solution, it can be attributed to either a needle outside the caudal canal or an anatomic abnormality of the sacrum. The first is more likely to be the case.

5. Extremely obese individuals are poor subjects for caudal analgesia, not only from

the standpoint of anatomic difficulties in properly placing the needle but also from the danger of infection.

6. This technic may be well suited for poor risk patients, e.g., those having cardiovascular disease, all types of pulmonary disease, nephritis, toxemia of pregnancy and eclampsia. In the latter group we did not encounter any severe drops in blood pressure; however, the diastolic and systolic blood pressures dropped towards a lower level and remained there.

7. The second stage of labor is definitely prolonged. The incidence of outlet forceps is markedly increased in the primipara.

8. Hyperactivity initiated by a foreign body, such as a catheter or an intra-uterine hemorrhage, disappears in the presence of caudal analgesia. However, it may be unwise to employ analgesia in the presence of intra-uterine hemorrhage, since the hypertonicity causes partial ischemia thereby controlling the hemorrhage. The method may well be indicated in cases of dystocia dystrophy of the uterus, where the excessive activity delays the progress of labor.

9. It must be stressed that both procaine and metycaine have toxic potentialities, should be used with caution and should be preceded by the administration of a short acting barbiturate.

10. Continuous caudal analgesia is not a routine method applicable to all patients in labor. The individuals should be carefully chosen rather than everyone be made to fit the category for its use.

11. This is a technic to be used only by physicians experienced in its management. Cognizance of the potential dangers of the drugs employed and ability to cope with any emergency is necessary for the safety of the mother and the baby.

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TUBERCULOSIS OF THE CERVIX

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There are four diseases of the cervix so similar in their gross appearance that biopsy is necessary to differentiate them. In the order of their frequency they are: (1) *cervicitis*, caused by gonorrhoea and infected erosions and lacerations; (2) *early cancer*; (3) *tuberculosis*, and (4) *syphilis* (in the tertiary stage). I have seen only one chancre of the cervix, but it is believed to occur quite often, in fact the cervix and vagina are believed to be the more frequent locations for the primary syphilitic sore in women. This has been proved in the gynecologic clinic of the Emory University Division of Grady Hospital, Atlanta.

Tuberculosis of the cervix is said to be rare and is secondary to tuberculosis of the internal genital organs, a descending infection. Curtis, quoting Norris, states that in 74 cases of genital tuberculosis in only four was the cervix involved. Wharton in his recently published book on gynecology states that in 307 cases of genital tuberculosis the cervix was involved in only 18; he says that it is one of the rarest of gynecologic disorders. Primary tuberculosis of the cervix is even rarer. All cases of genital tuberculosis are secondary to pulmonary disease or disease of glands in the chest or abdomen, and the infection is transmitted by the blood stream. The infection of the cervix probably is by direct extension. To quote Wharton again: "The endometrium is involved in 50 per cent of cases of genital tuberculosis." How the infection occurs in the primary cases is not known, whether it occurs from infected instruments, douche nozzles, or possibly from a male partner with tuberculosis of his genital organs. The symptoms that may be present are those from the pelvic tuberculosis, not the cervix. The symptoms and signs are not characteristic, being the same as are found in cervicitis from any cause. The appearance is not characteristic. The feel of the cervix is

From Emory University Division of Grady Hospital.

Read before the Medical Association of Georgia, Atlanta, May 12, 1943.

firmer than that of cancer and the tissue is not friable as in cancer, nor does it bleed as easily. The diagnosis can only be made by biopsy, which shows the characteristic tubercles, giant and epithelioid cells.

Treatment: The treatment recommended by all authorities is panhysterectomy, but in those cases where surgery is contraindicated external radiation offers hopes of a cure, as was true in one of the cases I wish to report.

During the years 1940-1942 inclusive, five women were seen and treated for tuberculosis of the cervix in the gynecologic service of the Emory University Division of Grady Hospital, Atlanta. All were diagnosed by biopsy. One was believed to be primary in the cervix, as there was no evidence of disease in the pelvis or lungs and no diseased glands could be found. We were never able to determine the source of the infection.

Report of Cases

A. R., colored, aged 38, was admitted to hospital June 14, 1940, because of profuse vaginal bleeding. Previous to her admission to the hospital she had been seen in the outpatient clinic. Her complaint at that time was intermenstrual bleeding, profuse and prolonged menstruation. On examination an ulcer was seen on the cervix, so a biopsy was taken and gauze packed against the cervix. The biopsy was reported *tuberculosis*. She returned each week for treatment, supposedly antiluetic, because her Kahn reaction was strongly positive. Her general physical examination was negative except for anemia and dehydration. X-ray of chest was reported by the roentgenologist as "revealing a mottled density in the 2nd left interspace anteriorly, and fibrotic and calcified glands in the left apex. The right costodiaphragmatic angle is obscured by pleural adhesions or a very small amount of fluid. Calcified cervical glands are evident in the soft tissues of the neck. The findings are those of a minimal tuberculosis."

After admission another biopsy was taken and again reported as "tuberculous cervicitis."

Examination of cervix showed it markedly hypertrophied containing a large crater lined with a fulminating friable mass which bled actively. Mass was limited entirely to cervix. While in the hospital she had many vaginal hemorrhages requiring packing for control. Her temperature was of the septic type ranging from normal in morning to 104 at night.

Laboratory examinations showed on admission Hb. 45 per cent, R. B. C. 2,600,000; leukocytes 14,900, with 82 per cent polys; sedimentation rate of 130 mm. in 60 minutes.

Six transfusions of whole citrated blood for a total of 2800 cc. were given her without improving the anemia. The antisiphilic treatment was continued. In July she was given deep x-ray therapy over pelvis,

600 r.u. anteriorly and 450 posteriorly. The process in the cervix progressed until the cervix was destroyed, leaving a large crater in the vault of the vagina. She was dismissed from the hospital August 8 and died at home August 24. This is not the usual course of tuberculosis of the cervix, so there must have been a virulent secondary infection. This was the only death among the five women whose cases are here reported.

K. E., colored, aged 34. First admission to hospital July 1938; her chief complaint at that time was constant pain in right lower abdomen and profuse vaginal discharge. Pelvic examination revealed a firm uterus about twice the normal size; tender mass to right of uterus and tenderness in left fornix. There was a superficial ulceration on posterior lip of cervix from which a biopsy was taken and reported as probably *tuberculosis*. A dark-field examination was reported positive for spirochetes of syphilis.

She was referred to the Venereal Disease Hospital where she was given intensive antiluetic treatment.

On Dec. 2, 1941, she was readmitted to the hospital complaining of the same symptoms as on the first admission, but they had become worse: accentuated at her menstruation and when on her feet for a long time. The vaginal discharge was more profuse and had become foul smelling. The uterus had increased in size, firm, retroverted fixed; bilateral tender masses in the region of the adnexa. Cervix was hypertrophied with an ulcerated area surrounding the external os, fairly firm and bled easily. Another biopsy was examined and reported as *tuberculosis*.

Her Hb. was 70 per cent, red cells 3,960,000; white cells 6,300, polys 76 per cent; sedimentation rate 17 mm. in 60 minutes. Kahn blood test was reported negative.

The diagnosis of pelvic tuberculosis with extension to the cervix was made.

On December 22, a panhysterectomy was done. Dense adhesions between the internal genitals and adjacent viscera made the operation quite difficult. The pathologic report was "healed salpingitis with endometriosis of one of the tubes, fibroids of the uterus, and tubercular cervicitis."

This case is reported as one of probable primary tuberculosis because of the absence of any evidence of old or recent tuberculosis of the lung, and the microscopic examination showed no tuberculosis of the internal genital organs.

She was seen in postoperative clinic Jan. 24, 1942, when a granulating area was seen in the vault of the vagina. Biopsy was taken and reported tubercular, so she was readmitted and the area cauterized with the Davis-Bovie machine. She was examined 1½ years later, and no evidence of disease was seen.

N. T., colored, aged 21, was admitted to hospital Aug. 12, 1942. Began menstruating at 15 years of age, every 28 days, 4 days' duration, normal flow. Two years later, at 17 years of age, she had what was diagnosed as acute pelvic inflammatory disease, after which time the menstrual periods became irregular, varying from a month to one year interval. Had not menstruated for one year. For a year before admission she had a dull aching, occasionally cramping pain in the right lower quadrant, which gradually became constant over entire lower abdomen. At first had a profuse vaginal discharge but

less during the last six months. For two years was treated for chronic pelvic inflammatory disease. Began to have night sweats for weeks before admission; had lost five pounds during the year; appetite poor.

On examination the entire lower abdomen was moderately tender but no masses were felt. Pelvic examination showed an hypertrophied cervix, fixed and tender; and a granulomatous lesion originating in canal and extending over anterior lip and invading anterior vaginal wall. No definite masses were felt in fornices, but some thickening and marked tenderness. Uterus was about normal size.

X-ray of lungs showed no active tuberculosis, but there were signs indicating healed lesions. Urine was negative. Hb. was 70 per cent; red cells 3,970,000; white cells 9,750, polys 70 per cent; sedimentation rate 4 mm. in 60 minutes. Kahn blood test was reported negative. Biopsy taken in clinic was reported "tuberculosis of cervix."

She was operated on Aug. 17, 1942, under spinal anesthesia. There were adnexal masses adherent to bladder and sigmoid and two abscesses were found in the mass of adhesions. Panhysterectomy was done. The sigmoid was opened but immediately repaired. Her convalescence was uneventful and she was discharged August 28 in good condition.

Pathologic report on tissues removed was tuberculosis. Three months after operation she returned with a small granulating area in vault of vagina. A biopsy was taken and reported as tuberculous. It was cauterized with actual cautery, but two months later it was still present, so it was cauterized again. A later examination showed it had *not* been cured, so an attempt will be made to relieve it with x-ray therapy through a vaginal cone.

A. P., colored, aged 40, was first admitted to the hospital Dec. 5, 1941, with a tumor mass filling entire lower abdomen and extending to umbilicus, which was freely movable, and not tender. Diagnosis: uterine fibroids. The cervix was small and firm, without visible evidence of disease. Her menstruation had been irregular—at times flooding, other times scanty, and one period of a seven months' amenorrhea not due to a pregnancy.

Her blood pressure was 214/120. Urine negative. Hb. was 70 per cent, red cells 4,800,000; white cells 6,200, lymphocytes 51 per cent, and polys 49 per cent; sedimentation rate varied, on admission 105 and just before operation 68. X-ray of chest was negative for tuberculosis. Kahn blood test was reported negative.

She was operated on December 15 under ether anesthesia, which we believe to be the safest anesthetic for hypertensive cases. Multinodular fibroids filling entire lower abdomen and extending to umbilicus were found; also a general tuberculous peritonitis; both the parietal and visceral peritoneums were studded with tubercles. A supracervical hysterectomy and bilateral salpingo-oophorectomy were done.

The postoperative course was uneventful, the incision healing by first intention. Jan. 24, 1942, she visited the clinic, and two or three small lesions were seen on the cervix, described as having the appearance of small blisters. A biopsy was taken and the pathologic diag-

nosis was tuberculosis. She was readmitted and the lesions fulgurated with the Davis-Bovie current.

This case shows evidence of an extension to the cervix after the removal of the internal genital organs with tuberculous disease. The disease was still present in November 1942, but she did not return for further treatment.

N. M. J., a colored rachitic dwarf, aged 27. This woman was interesting and instructive. She was admitted to hospital in shock because of loss of blood from vaginal hemorrhage. For one year she had noticed a growing mass in her lower abdomen. Four months before admission she had begun to have prolonged and profuse menstruation. Three days before admission she began to have hemorrhages and was admitted in shock.

Hb. was 20 per cent; red cells 1,200,000; white cells 12,900; sedimentation rate was 34 mm. in 60 minutes. Temperature ranged from normal to 101 for the first few days, then became normal. Five transfusions were given following which the Hb. rose to 56 per cent. A pelvic examination at this time revealed a fibroid uterus extending to umbilicus and fixed. In the region of both adnexa large fixed masses were felt which were softer than the uterine tumor. Speculum examination showed an ulcerating lesion covering entire cervix and extending out on the vaginal wall. It bled easily on manipulation and sponging.

Biopsy was taken and reported to be tuberculosis. X-ray of lungs showed a probable healed tuberculosis. Because of the extent of the lesion on the cervix and vaginal vault it was believed that surgery was contraindicated, so x-ray therapy was advised and given. Between October 22 and Nov. 21, 1941, she was given 1000 r. units to pelvis anteriorly and an equal amount posteriorly. During this time she was given treatment for an improvement of her general condition.

At the conclusion of the x-ray therapy another examination showed such a marked improvement in the cervix and vaginal vault that it was decided to remove the uterus with its fibroid and the adnexa to eradicate the probable focus of disease, but another x-ray picture was made of her lungs and an active lesion was found, so it was thought best to refer her to the Atlanta Tuberculosis Association for general treatment. Nothing more was heard from her until about two or three weeks ago. It was then found that there was a marked decrease in the size of the fibroid which had become movable, and that the adnexal masses had almost disappeared. The vaginal vault had healed, but there was a small area of granulation tissue on the cervix. A biopsy was taken from this which was reported as tuberculous. An x-ray of her lungs showed no active disease.

Notwithstanding the 2000 u. of x-ray given over the pelvis, she says that she menstruates regularly and normally and she had gained about five pounds in weight. She did not report to the Atlanta Tuberculosis Association, but after leaving the hospital went to work and has been at work since that time. She is now being given small doses of x-ray therapy directly to the cervix through a vaginal cone.

Conclusions

Study of these cases shows that there is nothing typical in tuberculosis of the female

genital organs. The involved cervix can only be diagnosed from other diseases of the cervix by biopsy. Again the importance and value of the biopsy are demonstrated. An alert and interested house staff and the rule of the department that every diseased cervix should be biopsied have made possible the collection of these five cases of one of the rarer gynecologic diseases. Tuberculous disease of the adnexa is rarely diagnosed before operation, but a positive biopsy from the cervix probably would aid in making the diagnosis before operation. The only successful treatment is radical surgery or/and x-ray. Cauterization either by actual cautery or the high frequency current has not been successful. The result obtained by x-ray therapy in the last case reported encourages us to use this treatment on the recurrences in the vault of the vagina following radical surgery.

In conclusion, I have just one slide that I should like to show as a typical picture of a biopsy from a tuberculous cervix. It shows a tubercle containing one large giant cell and two smaller ones with numerous epithelioid cells. These are the diagnostic features of tuberculosis of the cervix.

VAGINAL HYSTERECTOMY

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Vaginal hysterectomy was a favorite method of approach in the early years of operative gynecology, but was largely discarded for abdominal hysterectomy upon the advent of aseptic surgery and modern anesthesia. It is only logical to conclude that the margin of safety under present conditions must be much greater with our improved technic and a more thorough understanding of the female pelvis than it was during those early years. However, the probable explanation for the preference of the abdominal route, on the part of most operators, is that general surgery and gynecology have been taught as a combined specialty in the past, with emphasis on ab-

dominal exploration. I believe that the pendulum is rapidly swinging from the abdominal method to the vaginal and that the gynecologists of the future will perform more vaginal hysterectomies than abdominal hysterectomies. A careful review of the literature of the past five years, emanating from the large medical centers, emphasizes this trend in unmistakable terms and figures. Probably the greatest advantage of abdominal hysterectomy, exploration of the abdominal viscera, has been largely superseded by the use of the x-ray, gastroscope, peritoneoscope and other modern methods of precision diagnosis. It is very rare now that an abdominal exploration is performed without a reasonable and tentative diagnosis, but ten or twenty years ago this particular posting was of frequent occurrence. Of course, the greater experience, training and skill of the average gynecologist and surgeon, is also an integral part of this picture and lies directly in the path of progress.

The indications for vaginal hysterectomy are identical with those for abdominal hysterectomy with a few exceptions: Extensive pelvic inflammatory disease, large uterine or ovarian tumors, adhesions from previous abdominal section and the need for abdominal exploration are the main contraindications. I would also add carcinoma of the uterine corpus as a contraindication as the necessary dissection and exploration can be more adequately and safely carried out from the abdominal side, which is of paramount importance in malignant lesions. Some surgeons and gynecologists extend the contraindications to conform to their individual training, experience and preference, often to the detriment of the patient. However, if contraindications to abdominal section are present, even in malignancy of the corpus, it is often better to perform vaginal hysterectomy with the aid of the cautery or endotherm knife than to subject the patients to the hazard of the abdominal route. Of course, experience is necessary in performing a vaginal hysterectomy but the same dictum applies to abdominal hysterectomy, therefore I believe that all surgeons and gynecologists should perfect themselves in both methods.

The main indications for vaginal hysterectomy are obesity, senility, extensive uterine, bladder or rectal prolapse and many forms of constitutional disease. In my opinion, the indications can be extended to include cases of menorrhagia and or metrorrhagia in which malignancy has been ruled out, whether radium or x-ray has been used or not, if contraindications do not exist. I, also, am of the opinion that the vaginal route is preferable if the uterus is the seat of chronic metritis or other disease and contraindications are absent. Until five years ago it was my custom to perform vaginal hysterectomy only in cases which presented various degrees of relaxation of the pelvic supports, but during the past five year period I have not drawn this distinction and have been surprised at the facility with which vaginal hysterectomy can be carried out in nulliparous women with normal supports. To illustrate: a vaginal hysterosalpingo-oophorectomy was easily performed upon a 42 year old nulliparous woman weighing 220 pounds in whom 2400 mg. hours of radium had been used on two different occasions during the preceding year. The flooding attacks had not been relieved and she entered the hospital with a hemoglobin reading of 45 per cent. The specimen removed showed a 1 x 0.5 cm. ulcer at the internal os, which was bleeding profusely at the time of operation. Fairly good sized fibroids or ovarian tumors have been removed in women who had borne no children or with an unruptured hymen, without any great difficulty as the cutting of the cardinal ligaments allow the uterus to be drawn down to the vulva. Also, it is frequently noted that very obese women are inclined to some congenital prolapse of the undeveloped uterus which often renders the operation comparatively simple. Of course, in these cases it is often necessary to incise the perineum by one of the various methods but rarely to any great degree.

Congenital prolapse of the uterus is a rare condition in its complete degree and is usually best relieved by the bisection and suspension of Murphy, Crile or Hertzer. The indicated perineorrhaphy and anterior and posterior colporrhaphy should

always be carefully done in order to avoid a recurrence of the cystocele or rectocele with prolapse of the vaginal vault. However, first or second degree congenital prolapse of the uterus lends itself admirably to vaginal hysterectomy and there have been no recurrences in this group. The culdesac of Douglas should also be obliterated by purse-string sutures placed from below in the vaginal operation as has been advised in the abdominal route. In the complete congenital prolapse, if the uterus requires removal, I am of the opinion that the vaginal vault should be anchored to the abdominal wall. In one elderly woman in whom a vaginal hysterectomy was done by the method of Mayo, for congenital procidentia uteri, vaginal vault prolapse occurred which was later relieved by the colpocleisis of LeFort. It must be kept in mind, however, that congenital retroversion and other uterine displacements rarely extend to complete prolapse. I have seen only three of these cases while congenital uterine displacements and partial prolapse rendering vaginal hysterectomy simple have been frequently noted. The possibility that complete prolapse may occur in congenital lesions should cause the surgeon no great concern as this degree of the condition is so rare that it can practically be disregarded unless already present.

A great advantage in performing vaginal hysterectomy is that the operation can be terminated at any time and completed from the abdominal side if insurmountable obstacles present. It is only necessary to close the vagina with a few interrupted sutures of catgut, or if haste is imperative, pack the vagina and open the abdomen from above. All my cases have been prepared for laparotomy, if it should become necessary, but the abandonment of the vaginal route has only been necessary five times in my complete series. Usually the most difficult part of the hysterectomy has been completed before the need for abdominal section becomes apparent, therefore the abdominal hysterectomy is much easier than it would have been had all the steps been taken through the abdomen. Another important advantage is that the

pelvis is far more resistant to infection than the remainder of the abdomen and if it should occur, which is extremely rare, it is easily localized within the pelvis and logically drained along the pelvic planes. Adhesions are so rare as to be almost unknown as only a small area of the pelvis is exposed and any prolapsing viscera removed from the field by the insertion of one or two small packs.

While I have mentioned that the uterus can be removed by the vaginal route in women who have borne no children, yet, by far, the great majority of all types of hysterectomies are performed in women who have been confined and who usually present different degrees of relaxation of the pelvic supports. If the mechanics of labor are kept in mind, it can be readily understood that regardless of skill and care some stretching of the pelvic supports is bound to occur. Unless considerable meddling occurs in the conduct of labor, nature takes care of most of the stretching of these structures with the exception of the perineum. I believe that the perineum rarely entirely recovers its normal elasticity following a full-term delivery of a normal sized child unless the tension has been relieved by the performance of a perineotomy or episiotomy.

The low mortality and morbidity in vaginal hysterectomy is a great advantage. In my 210 cases there has been no mortality and but little morbidity. The only mortality which could in part be possibly charged to the operation itself, occurred in one patient who weighed 245 pounds and was a diabetic with mild nephritis, and who developed an acute lobar pneumonia three weeks postoperatively and one week after returning home in an ambulance some 35 miles away. There had been several cases of influenza in the immediate locality and she apparently developed a massive double lobar pneumonia and not a pulmonary infarction, although no autopsy was permitted. This patient had a complete prolapse and extensive plastic procedures were taken at the time the hysterectomy was done. One hundred and thirty-two of these cases have been personally examined from one to fifteen years following operation in an

effort to determine the end-results described later in this paper. The absence of post-operative shock and a smooth convalescence throughout is extremely gratifying. If shock does occur, it is readily alleviated by the administration of blood transfusions, infusions, etc., and the patient appears to be none the worse after three or four hours. Under morbidity, it might be mentioned that because of the use of rather large amounts of catgut in ligation of the broad ligaments in rather small segments, a low grade temperature will be present for a period of about a week. However, it rarely rises above 100 to 100.5 F. This symptom can be alleviated by the insertion of a small iodoform gauze wick beneath the suture line in the anterior vaginal wall. Pyelitis and cystitis occasionally occur but with no more frequency than that observed in abdominal hysterectomy. Nausea and vomiting, distention, etc., are almost unknown and are so rare that measures for their control are practically never necessary.

In my early cases there was some shortening of the vagina but since adopting the technic devised by Heaney of Chicago, combined with the suturing together of the uterosacral ligaments as advised by Bissell of New York, this condition has not been noted.

A few years ago most of my series were operated upon by a modification of the C. H. Mayo method of interposition of the broad ligaments between the anterior vaginal wall and the bladder. This technic was largely used at that time as mainly prolapse cases were included in my early series; other cases undergoing abdominal hysterectomy. However, as the indications were extended, the lack of later cystocele, rectocele or vaginal vault prolapse was so impressive that this technic was discarded except in procidentia uteri. Bunching of the broad ligaments by the technic shown in the slides, combined with a careful anterior and posterior colporrhaphy, has not been followed by a recurrence in any case. In acquired procidentia uteri the modified Mayo operation is best and should be combined with suture together of the uterosacral ligaments as well as suturing the round ligaments on each side to the resistant tis-

sues of the descending rami of the pubes. This technic has been used in only 14 per cent of the cases done during the past eight years. It is frequently followed by diurnal incontinence unless three or four sutures are placed in the dissected vaginal wall beneath the urethra before beginning the interposition of the broad ligaments in order to avoid kinking of the urethra. If the interposition of the broad ligament is utilized according to this technic, it is wise to suture the uterosacral ligaments together and to attach them with the cardinal ligaments to the posterior cut edge of the vaginal vault in order to avoid shortening of the vagina which occurred in several of our early cases. While the original technic of Dr. Mayo interposed only the round ligaments by suture, modifications have carried the suture through the united broad ligaments throughout the length of the anterior vaginal wall.

The technic of vaginal hysterectomy will not be described in detail because the drawings of Dr. Herbert Treusch well covers the separate steps much more eloquently. I shall show these presently. A few points which cannot be drawn without using too many illustrations will be described. Many operators do not incise deep enough in making the first incision and have difficulty in entering the proper cleavage planes. After the proper plane is entered, the bladder and anterior vaginal wall are easily dissected from the uterus and upward to the peritoneal reflection which may or may not be opened at this time, as seems desirable. In either instance, a small Deaver retractor placed beneath the bladder carries the bladder and ureters well out of the way so that they are not easily injured. The incision in the vaginal mucosa is then carried along the posterior vaginal wall exactly opposite the anterior incision. The dissection is carried well back to the uterosacral ligaments which are, if possible, identified before the culdesac of Douglas is opened. The uterosacral ligaments may be clamped along with the cardinal ligaments, or clamped and ligated separately for future identification. An important step is to incise the mucous membrane in each lateral fornix so as to join together the

anterior and posterior incisions but avoid injury to the uterine vessels. The mucous membrane is brushed from the cardinal ligament on each side in order to apply ligatures for the control of hemorrhage and future identification, as shown in the illustrations. Instead of following the illustrations, it has been my policy to doubly ligate the uterine and ovarian arteries and leave a double strand of catgut clamped distally for future identification. Unless doubly ligated, traction upon the ligatures may pull them off and result in an embarrassing hemorrhage. While the slides show the fundamental technic of hysterectomy performed by this method, yet they are necessarily abridged and many variations may be used. While delivery of the fundus through the anterior or posterior culdesac greatly facilitates the operation, yet in large uteri it is often necessary to ligate in small bites on one broad ligament, then the other in order to draw the uterus far enough downward for removal, frequently without delivery of the fundus at any time. It is not necessary to be greatly concerned because of the circulation from one side of the uterus to the other, or the anastomosis between the ovarian and uterine vessels as most of the anastomoses are controlled by the initial ligations. Also, it is unnecessary to place clamps next to the uterus as the dissection is usually carried so close to the uterus that there is very little reflux of blood on the same side, and there is never any anastomosis from one uterine or ovarian vessel to the opposite. I believe that the most important part of the technic is the removal of the bladder and ureters from the possibility of injury by dissecting the anterior vaginal wall and bladder from the uterus and retracting the bladder and ureters, and I have been greatly surprised by the distance which they are found from the operative field. Small bites, a centimeter in extent, within a curved uterine forcep and prompt ligature with control of hemorrhage at all times, are essential. All bleeding points should be carefully tied before passing on to the next step.

I have carefully observed the finished operation from above when it was necessary to remove the appendix or perform

some other operation through the abdomen, after the vaginal hysterectomy had been completed, and have been greatly surprised and agreeably pleased with the neatness of the closure of the peritoneum and the vagina. In a report from Northwestern University it was stated that injury to the ureters and bladder were five times more frequent in abdominal hysterectomy than in vaginal hysterectomy. The writer explained this apparent discrepancy by stating that the freedom from injury of these structures in vaginal hysterectomy could not be explained by the difference of degree of skill of the operators but only because of the relative ease of performing vaginal hysterectomy over abdominal hysterectomy.

Eight cases of enterocele have been found, one of which was about the size of a fetal head and was at first mistaken for a large rectocele, and are handled just as an inguinal hernia is handled with the additional precaution of suturing the uterosacral ligaments together, if they can be identified, after purse-string sutures are carried around the neck of the sac.

Incontinence of urine has been a difficult condition to handle in all prolapse of the uterus cases but has not in my experience been a result of vaginal hysterectomy in any instance. I have found by taking a careful history before operation, that most patients who complain of incontinence of urine after operation, had it in varying degrees before the operation. This part of the history should never be neglected. The Kelly stitch, which is a simple mattress stitch taken along the neck of the bladder in the internal sphincter, has been of some value, but in vaginal hysterectomy as well as all other operations on the pelvis, incontinence of the urine, if present before operation to any great degree, has often been difficult of operative correction.

In the 132 cases which have been carefully examined over periods of from one year to fifteen years, the results have been surprisingly good. There have been no cases of intestinal obstruction which could be attributed to the operation in any way, nor have there been other symptoms which might be due to possible adhesions between the abdominal viscera. In the early cases

approximately 25 per cent suffered shortening of the vagina, but since adopting the technic described this has not occurred in any case. Fourteen patients complained of varying degrees of incontinence of urine, but in all but one of these cases this symptom was present to about the same degree before operation. In the last named case, I am of the opinion that some degree of incontinence must have been present before operation as she had a complete prolapse with a badly infected bladder. The symptom has not been extensive in any case. As in all operations of this nature, it would be expected that there would be some breaking down of the perineal supports. However, this has been a very infrequent occurrence as an indwelling catheter has been used on all cases for a week or ten days and under these conditions the plastic operations hold up much better than if the patient is regularly catheterized, as is usually necessary. Cystitis is also avoided in this way. However, five of the early cases find it necessary to wear a ring pessary because of partial vaginal vault prolapse. This has not occurred within the last ten years except in one patient who had an infection of the perineorrhaphy and a rectopexy. A pessary was worn for about two years upon which a perineorrhaphy and rectopexy were performed with excellent results. There was no known injury to the bladder or the ureters, but the urethra was entered on one occasion which resulted in a urethra vaginal fistula with but few symptoms. This fistula was later repaired. In the main, the end-results have been greatly superior to those observed after abdominal hysterectomy.

The 210 cases were divided in age groups as follows: 20 to 30 years, 9 cases; 30 to 40, 21 cases; 40 to 50, 58 cases; 50 to 60, 55 cases; 60 to 70, 49 cases; 70 and above, 18 cases. While these figures include all vaginal hysterectomies done to the present time, including those performed on my service at Grady Hospital, the followup data on 132 cases do not embrace those operations performed during the past sixteen months.

Conclusions

1. Vaginal hysterectomy is preferable to

abdominal hysterectomy and can be performed in approximately 50 per cent or more of the cases where the indications warrant operation. Vaginal operations of all kinds are less productive of shock, less likely to produce infection or cause adhesions.

2. In prolapse cases, all steps of the operation can be carried out from below in a physiologic manner.
3. The operation is simple and can more readily be performed in most cases of menorrhagia and metrorrhagia, and is preferable to the use of radium in women under 45.
4. The end-results of the operation are excellent and are in direct proportion to the care with which the pelvic supports are sutured and anchored. A careful perineorrhaphy and, if indicated, an anterior and posterior colporrhaphy are essential for best results.
5. The mortality following the operation should be almost negligible.

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DISCUSSION OF SYMPOSIUM ON OBSTETRICS AND GYNECOLOGY

Dr. George A. Holloway (Atlanta): I have particularly enjoyed all these papers and I think all were educational. I am sure that a paper on obstetrics and gynecology is of interest to many of you who do general practice in the smaller cities. It is certainly of interest to me, especially in these two branches. From the number of obstetric cases that we have had in Atlanta in the past year, I am sure that you are doing obstetrics now more so than you have in the past.

I will not attempt to discuss any of these papers at length but offer a few remarks on each one.

The paper on "Rural Obstetrics Associated with Office Deliveries," by Drs. Torpin, Kay and Persall, was extremely interesting and I think a few years hence will find a number of physicians in the smaller towns delivering babies in their offices who are delivering babies in homes now. It is a protection to the doctor and it is timesaving, and anything that saves a doctor's time is of benefit to the patient. Our three main obstacles to overcome in the improvement of obstetrics, as you all know, are toxemias, hemorrhages and infections. With the pharmaceutical houses preparing intravenous solutions in this day and time a patient can be brought in and treated with intravenous medication and different analgesic agents and be made more comfortable, and if they do not respond to this type of treatment the membranes can be ruptured aseptically. People who hemorrhage pre- and postdelivery can be treated with plasma and intravenous fluids when the patient is in your office.

You may also scrub the patient for the bag induction, and you may also pack patients who hemorrhage after delivery from lacerations of the cervix or from atony of the uterus. For the infections, preparation of patients at the time they are brought into the offices or hospitals can be better done, whereas in the homes, the doctor has little time to do these things, such as shaving the perineum, and the doctor's office nurse is better equipped to keep the bladder and rectum emptied. These two conditions are very important for they offer possible obstruction and also cause cystoceles and rectoceles to develop. I hope this symposium will stimulate you to do this work in the future. I know two physicians who have recently written me that they are completely sold on the idea. I should like to hear some discussion from the men in small towns whom I should think would be in a better position to discuss this paper than I am.

Dr. Volpitto's paper was very interesting. My experience with caudal analgesia has been observatory and what I have read in the literature. Up to date I have not given any in private practice. There are technical difficulties in giving this anesthesia and with our crowded hospitals in the city today and with frequent changes in personnel and nursing staffs, I hesitate to begin this procedure at present. Lest we forget our teachings in obstetrics, the first stage of labor or dilatation of the cervix is more or less accomplished by the uterus. The second stage is accomplished by some uterine effort and a good bit by the expulsive effort of the abdominal muscles. By the administration of caudal anesthesia the expulsive efforts of the abdominal muscles are knocked out and might require more operative deliveries, and by more operative procedures you would have a higher morbidity. I have these two criticisms to offer at present.

I hope to have an opportunity to go to Augusta in the near future and observe the work that is being carried on.

The papers of Dr. Woodbury and Dr. Abreu teach us the danger of giving pituitrin promiscuously. Labor is slowed up sometimes, and we are in a hurry. There are a good many preparations on the market today that are nothing more than diluted pituitary extract which some drug companies offer to decrease the length of labor. They are all dangerous. The only thing that I can say is that we should be particular what type of preparation we use.

My time is up. I would like to discuss the papers of Dr. Denton and Dr. Cofer but will leave the time for other members.

Dr. J. R. McCord (Atlanta): Anything that can be done to lighten the burden of the man in general practice carrying a heavy load of obstetrics deserves serious consideration. Particularly is this true when the plan can be proved advantageous to the patient. To one who, for the past thirty years, has been in the very middle of most obstetric agitations, the immediate future of obstetric practice seems bright. An increasing number of young men starting the practice of medicine are particularly interested in the subject. The maternal mortality rate in Georgia for the year 1942 is the lowest

recorded. The rate was 4.1 maternal deaths for every 1,000 living births. The white rate was 3.2 and the colored 5.7. The national rate has been falling rapidly for several years. Surely improvement in obstetric practice and obstetric care has much to do with this lowered rate.

However, when one considers the almost complete lack of interference and the conservatism as practiced by the two co-authors one wonders if such results are not possible in almost any environment. If the obstetrician in the home can be persuaded to do something he knows isn't best for his patient, I doubt his conversion to conservatism in his office. There can be no question of the fact that an obstetric conscience is the basis for conservatism in obstetric practice. I might add an obstetric conscience cannot be veneered onto a conscience already a bit below par. We all make mistakes and often our mistakes are costly, but there is a soul satisfying satisfaction in knowing we were not careless or radical. It is a pretty good rule in obstetrics, when you are about to do something about which you have grave doubts, *not* to do it.

It is my opinion that some reason for obstetric furors of one kind or another, which are continually bobbing up, is the lack of sound obstetric teaching in our medical schools. Teaching the mechanism of labor is a rather drab procedure but it is the foundation upon which our clinical obstetric house must be built. Abnormality should not be stressed at the expense of the normal. Nor can conservative obstetrics be learned from lectures, textbooks and manikins. Facilities must be provided where students observe many labors and actually deliver as many women as possible.

It is my studied opinion the procedure, as discussed by the authors, is safe, sane and practical. DeLee was fond of saying it was the man behind the forceps and not the particular type of forceps. It is the man behind the office and not the office that will determine results.

I am rather inclined to think Dr. Cofer's paper is apt to give one a false sense of security when contemplating vaginal hysterectomy. There can be no question of the great value of the operation in properly selected cases. Conversely, when the indications are broadened it may become a dangerous and difficult operation. I am inclined to limit the operation to uterine prolapse, particularly in elderly and obese women. The vagina should be large and if too small, requiring incisions, the abdominal operation should be done. Dr. Cofer mentions *extensive* pelvic inflammatory disease. I am sure the operation has but a small place in Negro women. Some detailed discussion of the pathologic changes for which the 210 vaginal hysterectomies were done would have increased the value of the paper. Some of Dr. Cofer's conclusions seem a bit enthusiastic and, I think, should be carefully considered. I do not think vaginal hysterectomy is preferable to abdominal hysterectomy except in certain selected women. I do not think vaginal hysterectomy is simpler and gives a better end-result. I do not think vaginal hysterectomy is indicated for menorrhagia or metrorrhagia in women under 45. There may be some exceptions but not many. Dilatation and curettage is probably the most conservative treatment for most women under 45 with functional hemorrhage. This operation may also establish the diagnosis. The mortality should

be nil—but is it? My personal opinion is we should not press the indications and give an admirable procedure an ill deserved criticism.

Dr. James B. Kay (closing): I will not have time to finish the case reports, but I would like to say that I appreciate the discussion, and feel that office deliveries will enable busy general practitioners to see many more patients and at the same time do a great deal to cut out meddling obstetrics.

Dr. Paul P. Volpitta (closing): I agree thoroughly with Dr. Holloway in regard to present-day changes in personnel and the difficulties of administering caudal analgesia under such conditions. You need a well organized staff to do it. One individual cannot handle it. Unless you have a well organized staff which recognizes the essential danger of the technic and are able to take care of the flow with careful technic, it should not be employed.

In regard to conservative practice, we are extremely conservative at the University Hospital, as reflected by the fact that in the past year our operative obstetrics amounted to 2 or 3 per cent. From the standpoint of using forceps, I agree thoroughly with Dr. McCord in what he says. I believe that it is necessary to emphasize over and over again that you do need experts to work this analgesia. I don't believe an individual who does occasional obstetrics or anesthesia should attempt it. They are going to get into trouble. I personally don't believe in doing anything routinely. I certainly do not do caudal anesthesia routinely. It seems to have a definite place, but that must be determined. A poor risk patient is a very definite risk with analgesia or anesthesia. It seems to have a definite place in obstetrics where we know the fetus is in distress. In all the cases that we have ever had, every baby breathed immediately upon delivery except one. Postmortem showed a congenital heart anomaly.

Dr. R. A. Woodbury (closing): Dr. Abreu asked me to close for both my paper and his paper, if that is agreeable.

One point we should like to add pertaining to the induction of labor by giving pituitary extract. When labor starts spontaneously, it usually requires 6, 8, 24 to 48 hours for labor to start. We try to induce pituitary extract easy. We try to induce 30 or 40 minims an hour. If we have to wait 24 hours, we say it doesn't work. I am strongly of the opinion that if one must use pituitary extract to induce labor, he should use it in small doses. Keep below 1 minim to start with. Build up to 1 minim or build up to 2 minims, but allow 24 to 48 hours to elapse in order to induce that labor. That is the length of time that nature takes.

One point I'd like to mention about the increase in venous outflow from the uterus during the uterine contraction. In patients with threatened cardiac decompensation uterine contractions empty a significant amount of blood into the venous reservoir and put added load on the heart, so one point which has not been appreciated is that the patient receives intermittent periods of excessive load due to increased venous return; that is in addition to increased load put on the heart because of physical work the patient is doing in delivering the baby.

THE PRESIDENT'S PAGE

"HONOR TO WHOM HONOR IS DUE"

The Medical Association of Georgia owes a debt of gratitude to one of its own family: the Woman's Auxiliary! For twenty years this organization has been welding the bonds of fellowship between the members of the medical profession of Georgia, and those dependent upon it for guidance in matters pertaining to health. One of its first problems was to cement the doctors and their wives into a closer social organization so that they could better know each other; then they could formulate a plan by which the Auxiliary could relieve the doctors of much educational work regarding health and nutrition, thus leaving more time to them for the practice of medicine.

To safeguard the coordination of the efforts of the Women's Auxiliary an advisory committee was appointed by the President of the Medical Association of Georgia to hold annual counsel regarding their proposed activities.

A few county and district societies were slow to organize a Woman's Auxiliary but the good was so evident and the demand so forceful that now practically every county society has its auxiliary. At first few activities were undertaken, such as securing speakers for health subjects to lay assemblies; to Parent-Teacher organizations, to schools and to women's clubs. The Student Loan Fund, by which Georgia boys who would agree to practice medicine in Georgia, were enabled to attend medical colleges and return the loan when engaged in practice, was one of the first efforts of the Auxiliary. This fund is already furnishing much needed doctors for our state.

A committee from the Woman's Auxiliary cooperates with the Councilors of the District Medical Societies in showing the educational health films, furnished by the film library of the State Department of Public Health. In my opinion, no type of teaching health problems so indelibly stamps its lessons upon the minds of young or old as the lecture films!

Other committees are stressing various activities of the Auxiliary, such as Public Relations, War Services, Hygeia, Doctors' Day, Research in Romance of Medicine, and others—all most laudable—and all are advancing medical education in Georgia.

During the past year some of the chapters of the Auxiliary have done outstanding work in the field of blood typing. Rosters of the various types are kept on file in all the hospitals in Atlanta and other cities of Georgia. This facilitates prompt transfusions of blood where delay might



W. A. SELMAN

mean the loss of a human life. This practice has spread to numerous organizations and churches, that transfusions may be readily obtainable for their own members. What group of people fits more perfectly this type of work than doctors' wives?

Year by year more stress has been put upon some special feature of health education, such as nutrition, cancer or tuberculosis, and this year Mrs. Olin S. Cofer, President, has chosen for her theme song, "Health for Defense." Nothing could be more appropriate at this time when so much depends upon the health of our men and women in time of war. Healthy minds in healthy bodies will be in just as great demand in establishing a just and lasting peace.

The United States Government is asking each state in the Union for two wartime services right now! First, to recruit young women for the U. S. Cadet Nurses' Corps; and second, to assist your local nurses' association in the registration of all graduate nurses during the week of February 7 to 14. The chairman of your local auxiliary chapter can give you detailed information how to contact these agencies.

Our auxiliary has done so much original work, and has assisted other organizations in war work such as the Red Cross and the Office of Civilian Defense, that the Southern Medical Association and the American Medical Association have expressed most favorable comment. As Mrs. James N. Brawner, an ex-president of the Auxiliary expresses it: "The doctors' wives have met the challenge; they have asked the blood of others, and they have given their own."

"Honor to whom honor is due."

W. A. SELMAN, M.D.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

FEBRUARY, 1944

**CANCER: ACTION IN TIME
MEANS LIFE**

It has been stated that cancer is the most curable of the fatal diseases. That is an interesting statement and is not a contradiction of itself, as it might at first seem to be. Its justification lies in the nature of cancer itself, for cancer in its early stage is localized, limited, and capable of being completely removed or destroyed.

Cancer in its late stages is as sinister as a disease can be. It is widespread and has invaded surrounding tissues with ill-defined irregular strands of abnormal growth. If untreated and unchecked, cancer is uniformly and universally fatal. It is this grim fact that brings out the contrast between early and late stages of the disease.

The picture, however, is far from being a gloomy one. Each year more and more people are learning that "time" is the key word in cancer control. Each year thousands more people are coming to their doctor with very early signs and symptoms that may mean cancer. As a result they are being treated in time to prevent cancer or to cure it if it has started. The value of annual or semi-annual physical examination is becoming clearer to an ever-increasing number of men and women. The Women's Field Army of the American Society for the Control of Cancer is growing yearly at a faster rate. Today three hundred thousand women throughout the United States are enlisted in the fight against cancer — the fight to bring knowledge and confidence into every home in the country.

Cancer prevention clinics — where perfectly well persons report periodically for a physical "check up" — have been established in some cities and are doing excellent work. The idea will spread and grow. Lives will be saved, suffering avoided. Death will be cheated. Americans of the future will visit such clinics as a matter of routine.

It is well when the world is darkened by the fierce storm clouds of war to remember that there are men and women working quietly but tirelessly to allay fear and to bring peace and hope to hundreds of thousands of people — to your friends and mine and to your family and mine — perhaps to you and me ourselves.

For thirty years the American Society for the Control of Cancer at 350 Madison Avenue, New York City, has been the leader in this campaign. It will gladly provide, without charge, information which you may desire. It asks you to enlist in the fight against cancer for your own sake as well as for those whom you may be able to help. De not delay. Remember that in cancer "action in time means life."

C. C. LITTLE, Sc.D.

**METHOD FOR COMBATING SHOCK
FROM BURNS**

A possible means of combating the frequently fatal shock that accompanies severe, extensive, third degree burns is described in *The Journal of the American Medical Association* for January 22 by Charles L. Fox, Jr., M.D., New York, in a preliminary report on the administration by mouth of sodium lactate solution instead of administering plasma by injection into a vein.

"The results were so successful as to warrant further extensive trial of this therapy," he says. "There was but one death (which occurred within four hours after admission) in 17 cases of full thickness [third degree] burns."

As Dr. Cox points out. "The shock syndrome which follows severe burns is accompanied by hemoconcentration and diminished plasma volume." Recently plasma transfusions have been used as a means of restoring the diminished plasma volume.

"Recent accounts of two catastrophes involving many burn cases, the Japanese attack at Pearl Harbor and the Cocoanut Grove fire in Boston," Dr. Fox says, "have indicated the relatively high mortality from severe burns even when large amounts of plasma are used. The English experience with serum or plasma also revealed a high mortality from burn shock."

He points out that recent investigations have revealed that when large plasma transfusions were administered soon after the receipt of the burn, there was not as great a rise in the plasma volume as had been anticipated, and, as a rule, the rise that was obtained proved to be only temporary. As far back as 1926, Dr. Fox says, the late Dr. E. C. Davidson advised the admin-

istration of sodium chloride in severe burns instead of dextrose solutions, because Davidson had observed that the plasma chlorides of patients suffering skin burns were low and the urine almost devoid of sodium chloride for as long as three weeks after the burn, in spite of adequate salt intake.

The procedure reported by Dr. Fox involved the immediate administration by mouth of large amounts of a chilled sodium lactate solution and at fifteen minute intervals thereafter on schedule. Any vomiting, which frequently occurs in severe burns, was treated by the administration of more fluid, and frequently a small tube was passed through the nose and connected with a drip apparatus so that the sodium lactate was administered constantly. A very careful record of fluid intake is necessary and the urinary output has to be carefully watched and all urine collected.

All cases of heat burns admitted to Harlem Hospital since Feb. 1, 1943, and 1 case of severe burns admitted to the Babies Hospital have been treated according to this procedure. The local treatment of the burns involved the application of an ointment containing tannic acid and either sulfadiazine or sulfathiazole.

"In general," Dr. Fox says, "the large volumes of fluid were well tolerated; the patients wanted water to drink but after a short time became accustomed to the lactate and drank copiously of their own volition. Occasionally, frequent vomiting occurred and was treated by passing a Levine tube and administering the lactate by steady drip. When the initial vomiting persisted, intravenous infusion was used temporarily to support the circulation until the stomach became adjusted to receiving the steady flow of sodium lactate. . . ."

"As these cases required from one to eight skin grafting operations, the extent of full thickness burn could be definitely ascertained. The results in these severe burns constitute prima facie evidence of the therapeutic efficacy of large amounts of oral sodium lactate instead of intravenous plasma. . . ."

Dr. Fox says that the observations by Davidson on the disappearance of the chlorides from the urine were strikingly confirmed in the series of cases he reports. Further studies of the redistribution of sodium by the body are in progress, and an extension of the studies he and his colleagues have already inaugurated may answer, he says, the important question as to whether a judicious combination of small amounts of plasma with sodium lactate might be more effective than sodium lactate alone.

"Whatever may be the ultimate conclusion about the added benefit of small amounts of plasma," Dr. Fox continues, "the fact that extensive and severely burned patients survived and recovered after the oral administration of isotonic sodium lactate instead of the intravenous injection of plasma, proves that correc-

tion of the sodium imbalance is of major importance. . . ."

"The simplification in the care of such patients is worth noting. Intravenous therapy is dispensed with and the medical staff and nurses are relieved of this burden. The sodium lactate costs but a few cents and the hospital supplies of blood and plasma are conserved. The problems of sterile solutions are eliminated.

"It is scarcely necessary to mention the military advantages of the simplification of shock therapy that would follow conclusive demonstration of the efficacy of this treatment of burn shock. For the present at least, the emergency use of this method under circumstances in which plasma is not immediately available seems clearly indicated. . . ."

He admonishes, however, that final judgment on this method should await more complete reports.

PAGE FROM THE PHYSICIAN'S DIARY

Reprinted from The Texas State Journal of Medicine,
39:495 (Jan.) 1944

A page from the *Physician's Diary*: "The New Year brings many deep-rooted convictions to the family doctor. He is, first of all, proud of the humanitarian part his profession is playing in the present conflagration and how, at long last, the lay public has awakened to the importance of the intricate and highly technical skills in the healing art developed by the individualistic practice of medicine. He is grateful, also, that his country is fighting for a just cause and that the mechanism of the present war is not the responsibility of the Stars and Stripes. He is saddened by the innumerable deaths of youngsters he has ushered into the world and watched grow into young manhood. The most sombre note in his convictions, however, is the inevitability of war until that Utopian future when the peoples of all nationality, creed, and color have evolved to the intellectual state where it will be possible for them to live by the Golden Rule. Until that time the two world-wide wars within his decade has led him to suspect that the old, old story will begin again and again when international politicians will stir men to hatred and manslaughter; profiteers will hurry joyously about their business of accumulating blood money; peaceful manhood, smothering despair within their souls by songs, licentiousness, and dissipation will be torn from their labors, their wives, their mothers, their children—hundreds of thousands of simple-minded, good-natured men with murderous weapons in their hands; that they will march, freeze, hunger, suffer disease, or finally come to some place where they will slay or be slain and the Christianizing of mankind, which has already begun, will lapse for scores of years. The family doctor hopes, with all the accumulated philanthropy of his thousands years of Hippocratic history, for a Colossus of Leadership who will amalgamate all the forces for good for a final and permanent abolition of the periodic depredations of the Four Horsemen!"

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

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Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone WALnut 8911; residence, JACKSON 7979.

INTEGRATION OF PUBLIC HEALTH INTO BASIC EDUCATION OF THE NURSE

MRS. GLADYS LILLY GARLAND, R.N.
*President, Georgia State Organization for
Public Health Nursing
Atlanta*

The twenty-year period from 1913 to 1933 was one of the most eventful in the world's history, taking in World War I and all its disrupting influences, the postwar phase of artificial prosperity, and the first black years of depression. Nursing, like all other social institutions, was upset by this worldshaking series of events. Nursing schools were not in a very secure position before all these changes came and they had many internal weaknesses that made them less able to weather such storms.

A revelation of failures and shortages came out through surveys and studies made. Nurses were becoming more "education conscious," and other professional and lay groups were beginning to be aware of the serious issues in this field.

One study conducted during this period was made by the National Organization for Public Health Nursing. This study furnished some significant facts in relation to the education of nurses. The main purpose of the study was to determine what type of work was actually being performed by public health nurses, how it was done, and how to improve it. The common assumption that nursing schools were providing an adequate basic preparation for all fields of nursing found little support from this study. According to the authors: "The present survey merely substantiates what is already known, by exposing further inescapable and disconcerting facts. But before this problem can be met, present efforts to reorganize fundamental nursing education must bear fruit in more than isolated instances. The health approach for relating nursing to the public health field as well as scientific knowledge and the technics of nursing, need to be infiltrated through the whole curriculum."

The quality of performance of nurses in pub-

lic health work was evaluated by using four criteria based on the essential elements in a good home visit; namely, approach, technic, teaching, and adequacy of care.

Before deciding on the content of the curriculum, typical nursing situations that professional nurses would be expected to meet in the hospital, home, and community were analyzed to determine what kinds of nursing activities, disease conditions, personal relationships, and other elements were involved; also, what knowledge, skills and attitudes were most essential for the successful adjustment of nurses in such situations. From these and other sources, learning experiences of various kinds were selected and arranged in progressive steps designed to introduce students to a wide variety of nursing situations and to carry them as rapidly as possible toward their professional objectives.

In 1942 a curriculum study was published for the use of schools concerned with the preparation of public health nurses. The Public Health Nursing Curriculum Guide was the work of a joint committee representing the National Organizations for Public Health Nursing and the United States Public Health Service, and represented the thinking of a large number of nurses, physicians, educators and others. The material is classified under sixteen functional areas which were selected for special study "where the greatest saving of life and suffering can be realized." Since 1910 when the first university program of study in public health nursing was organized, the number of programs has grown steadily until at the present time twenty-eight universities or colleges have programs of study approved by the National Organization for Public Health Nursing.

During the late thirties war broke out again in Europe and by summer of 1940 the Second World War was raging. President Roosevelt's announcement of a limited emergency came during the biennial meetings of the National Nursing Organizations in Philadelphia. This was soon changed to an "all out" effort. Every nurse knew that the speeding up of military and indus-

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WOMAN'S AUXILIARY

President—Mrs. Olin S. Cofer, 948 Lullwater Road, Atlanta.

President-Elect—Mrs. W. T. Randolph, Winder.

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Treasurer—Mrs. Lucius N. Todd, Rural Delivery No. 2, Augusta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. J. Harry Rogers, 1325 Peachtree St., N.E., Atlanta.

PRESIDENT'S MESSAGE

Mrs. Olin S. Cofer, Atlanta, president of the Woman's Auxiliary to the Medical Association of Georgia, urges all state auxiliaries to keep up their membership roll this year and says on this subject:

"Within the next few days each auxiliary will receive from the state treasurer, Mrs. Lucius N. Todd, blanks to be filled in with the names of paid-up members. I would appreciate it very much if presidents and treasurers would contact each doctor's wife in their medical society who has not already paid her dues and ask her to send in her dues very soon in order to keep up the membership and their interest in the auxiliary. Also I would like to suggest that your auxiliary might possibly like to pay state and national dues of the members who are away from home with their husbands in the service; or if their addresses are available to write and ask them if they would like to send in their dues in order to keep up the membership of the home auxiliary.

"It was voted at the meeting of the A. M. A. in Chicago last June to send membership cards to each state treasurer as soon as remittance has been made to the national treasurer. Then the state treasurer will send to each county president the cards for her auxiliary. This membership card will indicate that the person whose name is written thereon is in good standing with her local auxiliary and will admit her to any regular auxiliary meeting in the United States. This move was taken primarily to aid the wives of doctors in the armed services and to help them establish themselves in auxiliary work wherever they may be stationed without losing their identity with the home auxiliary."

WARE COUNTY

Mrs. W. C. Hafford and Mrs. Raymond J. Johnson were hostesses at the recent meeting of the Woman's Auxiliary to the Ware County Medical Society held at the home of the former in Waycross. The president, Mrs. W. M. Flanagan, presided, and reported that plants were sent to the Waycross Army Air Base during the holidays. She urged members to renew their subscriptions to Hygeia, the health magazine, published by the American Medical Association. Plans were made to participate in the annual

drive of the Women's Field Army for the Control of Cancer. It was announced that Mrs. Robert C. Walker, Red Cross executive, would speak at the next meeting. Nine members were present and Mrs. Hyman Saunders was welcomed as a new member.

SAVANNAH AUXILIARY

The Woman's Auxiliary to the Georgia Medical Society met recently at the home of Mrs. L. W. Williams, 135 East 45th Street, in Savannah, with Mrs. H. C. Frech and Mrs. S. F. Rosen as joint hostesses. An invitation from the Savannah Health Center to the Women's Field Army of Chatham County inviting that group to become a member agency of the Health Center was accepted by the Auxiliary on behalf of the Field Army. A motion was made and passed that since the Georgia Medical Society has suspended dues of members serving in the armed forces for the duration a like courtesy be extended to auxiliary members whose husbands are in the service.

BLOOD TYPE REGISTRY

Mrs. Edgar H. Greene has returned from Winston-Salem, N. C., where she outlined the plans of Atlanta's blood-type registry for a group of civic and medical leaders. Mrs. Greene made the trip at the invitation of Dr. G. Carlyle Cooke, medical director of the Office of Civilian Defense. She stressed the city-wide registration of blood-types as a great factor in preparedness in time of war and a bulwark against disaster in time of peace and told how the Doctors' Aide Corps of the Woman's Auxiliary to the Fulton County Medical Society cooperated with the Office of Civilian Defense in Atlanta in the local blood-type registry. A registry will be started soon in Winston-Salem. Atlanta was the first city in the country to establish a city-wide registry of blood types, Mrs. Greene having conceived the idea in 1942 while president of the Woman's Auxiliary to the Fulton County Medical Society of having this organization take up this important work. At present there are four laboratories in Atlanta, all staffed by auxiliary members who have been especially trained in the technic of blood typing.

FULTON COUNTY

The Woman's Auxiliary to the Fulton County Medical Society met on January 7 at the Academy of Medicine in Atlanta, Mrs. J. Harry Rogers,

the president, presiding. Dr. Ben Hill Clifton, newly installed president of the Fulton County Medical Society, made a most interesting talk, stressing the importance of the good fellowship promoted by the auxiliary between its members and the society and urging members to continue with their health education work and other projects along a health line in the community. The report of Mrs. Hal Davison, chairman of the benefit supper bridge sponsored in December, was read and received with enthusiasm, as over \$300 was realized at that time. It was announced that Mrs. Olin Cofer and Mrs. Edgar H. Greene, two members of the Fulton auxiliary, were honored at the recent convention of the Woman's Auxiliary to the Southern Medical Association, the former having been elected historian and the latter councilor for Georgia. After the business meeting Mrs. John Turner and her committee served a delightful luncheon.

WAGNER-MURRAY BILL

Mrs. Luther H. Kice, of Garden City, Long Island, N. Y., the legislative chairman of the Woman's Auxiliary to the American Medical Association, has issued some interesting suggestions on how doctor's wives can mobilize public opinion against the Wagner-Murray-Dingell bill, which would overthrow the entire structure of medical care in this country.

She says, in part. "Enlist each member as a key person to work with other groups with whom she has contact or influence, scheduling herself or some suitable person to give talks on objective aspects of the bill; stimulate general discussion; answer questions from the group; furnish printed matter; stimulate writing of letters to congressmen, preferably at the meeting; obtain an expression of opinion, in form of a resolution, against the bill.

"Set your most able members to the task of contacting such influential bodies as the Board of Health, the Council of Social Agencies, the League of Women Voters, the Federation of Women's Clubs, the Council of Churches, for the purpose of stimulating the passing of resolutions against the bill. Make a list of men and women who would qualify as speakers or discussion leaders. Besides auxiliary members this group might include executives of hospitals or medical plan, members of the county medical society and lawyers. If possible, these speakers should be brought together to discuss the talking points, add to each other's knowledge and check the accuracy of what they know."

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

INTEGRATION OF PUBLIC HEALTH INTO BASIC EDUCATION OF THE NURSE

(Continued from pag 50)

trial defense called for adjustments in nursing schools and nursing services. The need for greater unity, speed and effectiveness in defense efforts led, in the summer of 1940, to the organization of a Nursing Council for National Defense in which all national nursing organizations and government nursing agencies were represented.

In June 1943, Congress adopted the Bolton-Baily Act. A Student War Nursing Reserve is set up in the Public Health Service; and provides for tuition and fees, free uniforms and monthly stipends for students enlisting in the reserve, as well as scholarships for graduate nurses.

Systematic and careful planning in terms of social needs is necessary in nursing education, especially in view of the present situation and the need for postwar planning.

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THE PHYSICIAN'S BOOKSHELF

Applied Dietetics by Frances Stern, published by The Williams & Wilkins Co., Baltimore, priced at \$4, now in its second and revised edition of 265 pages, contains much material for the planning and teaching of normal and therapeutic diets. This book is without a doubt one of the best to be found when searching for practical information regarding dietetics.

Solving School Health Problems by Dorothy B. Ny-swander, detailing the Astoria Demonstration Study, published by the Commonwealth Fund, New York, and priced at \$2, is another laudable effort to point the way in solving school health problems. Full of good information from beginning to end, this volume of 377 pages can be used to advantage by physicians, dentists, nurses, public health officials, teachers, parents and children.

Office Treatment of the Nose, Throat and Ear, a new volume of 480 pages by Abraham R. Hollender, M.D., associate professor of laryngology, rhinology and otology at the University of Illinois College of Medicine; published by The Year Book Publishers, Chicago; priced at \$5; should be of value to every practitioner of medicine. Fully illustrated and written in language understandable and without too many trimmings, this book will no doubt be used frequently once its value is determined.

Standard Nursing Procedures of the Department of Hospitals of the City of New York, a volume of 436 pages compiled by the Committee on Nursing Standards, Department of Hospitals, New York, N. Y., traces nursing care in the City of New York from the year 1784, and at the same time records briefly those procedures found to be good and wholesome at the present time. Published by the Macmillan Co., New York, N. Y., and available to all the bookstores throughout the land, this book will be most useful in promoting better nursing care among the people. Price \$3.25.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

GONORRHEA, CHANCROID, GRANULOMA INGUINALE AND LYMPHOGRANULOMA VENEREUM

The war has caused an intensified national campaign against the venereal diseases, and attention is again called to the "other venereal diseases"—other than syphilis. All too often some physicians, both in private and clinic practice, overlook these diseases by not suspecting them and by considering every lesion present to be syphilitic if the blood test is positive for syphilis.

Laboratory diagnostic aids in the diagnosis of these diseases are easily mastered, inexpensive, and for the most part, reliable. They should be employed in differential diagnosis, and technique of the several tests will be mentioned under each disease.

Every physician who treats venereal diseases should consider himself as much a protector of the public health as does the health officer. He should accept the responsibility of following up the contacts of his cases, or report them to the local health department which will assume this responsibility. The physician may make inquiry regarding contacts of infectious cases in such a manner as to gain the confidence of his patient. Having obtained this information the physician should see that all contacts are examined, and treated if infected. Every attempt should be made by the physician to hold each infectious case under observation until a cure has been effected.

Gonorrhea

A positive diagnosis of gonorrhea is made only when the gonococci are found. Cultures have proved more reliable than smears. Every physician or clinic is not equipped to do gonorrheal cultures, but smears should be made on all suspected cases. A provisional diagnosis may be made and treatment given on: (1) history of sex contact with known case; (2) history of transmitting the disease to previously uninfected sex partner; (3) history of recent inflammation or signs of inflammation with pus discharge of urethra; (4) redness, swelling, pus discharge of Bartholin's glands; (5) swelling, purulent discharge from cervix; (6) painful enlargement of tubes; (7) symptoms of frequent, painful urination. It is better to treat a few persons who do not have the disease than to let others go untreated in the absence of a positive diagnosis by smear or culture.

Frequently the laboratory is blamed for failure to obtain positive culture or smear when it may have been the fault of the examination. This is more particularly true in obtaining material for smears and cultures from women. It

is necessary to clear the mucus plug from the cervix and compress the cervix with sponge forceps or the blades of the bivalve speculum to get good specimens in many cases. Skene's glands just inside the urethra should be emptied by pressure upward and outward on the urethra from within the vagina. Specimens from Bartholin's gland are taken only when the gland is enlarged or where the orifice of the duct is inflamed or seen to contain pus.

Considered generally, there are three types of patients: (1) those who stop treatment before a cure is established; (2) those who do not respond to chemotherapy; (3) and those who appear to be cured but still harbor the gonococci (latent or "carriers"). Proper patient instruction and a show of personal interest on the physician's part will reduce the number of patients in the first group. A system of follow-up, or reporting to the health department for follow-up, of lapsed cases will induce many more to resume treatment.

The most favored plan of treatment at present is sulfathiazole in courses of 1 Gm. four times a day for 5 days. The dosage of sulfathiazole for gonorrhea in children is 0.032 Gm. per pound per day, not to exceed 2 Gm. a day. The patient should be instructed to drink large amounts of water to prevent possible crystallization in renal tubules. This treatment effects a cure in 85 to 90 per cent of the cases if the patient abstains from all forms of alcohol, or from sexual excitement or intercourse. In patients continuing to show signs of the disease after a course of sulfathiazole, the above plan of treatment should be repeated after a 5-day interval. Failing to respond to two courses of sulfathiazole the patient is considered chemoresistant, and further sulfanamide therapy usually should not be given. Occasionally failure to respond to sulfa drugs may be transitory, but a third course of sulfathiazole should not be given unless the patient is confined to bed. The most likely reason for failure is some focus of infection in Skene's, Bartholin's or cervical glands in the female and Cowper's glands, the prostate or seminal vesicles in the male. Here steps must be taken to promote drainage of the glands still harboring the gonococci. Gentle, local treatment may be tried, such as injection of 5 per cent mild protein of silver or low pressure irrigations of 1:8000 potassium permanganate. Strong chemicals or sounds should not be used. Douches and local application to the cervix may cause the gonococci to be forced into the fallopian tubes, thus producing salpingitis. The treatment of chemoresistant gonorrhea by fever therapy has proved very effective. Recently the use of penicillin in these cases has been very satisfac-

tory, and is the method of choice where the drug is available. If facilities are not available locally for fever therapy or penicillin treatment for chemoresistant gonorrhea, the U. S. P. H. S. medical centers at Oatland Island, Savannah, and at Augusta are accepting such cases for this treatment.

As for the cases who appear to be cured, a small percentage harbor the gonococci and are capable of infecting others. In the absence of culture studies all patients are regarded as potentially infectious, and are urged to protect their sexual partners by the use of condoms for at least three months after disappearance of all symptoms. If facilities for cultures are available three consecutive negative cultures taken at weekly intervals may be accepted as evidence of cure. In the case of a woman, one culture should be made immediately after menstruation. Material for cultures in men should be the first few cubic centimeters of urine passed immediately after a prostatic massage. Prostatic massage should not be done until both specimens of urine in the two-glass test have been clear for 2 weeks. If any signs of recurrence appear, treatment should be repeated, and subsequent criteria for cure established. Relapse rates are from 5 to 10 per cent.

Chancroid

Chancroidal disease, characterized by fairly typical "punched-out" ulcers, accompanied usually by regional adenopathy, may occur concurrently with other venereal diseases. Multiple lesions of chancroid are usually due to its auto-inoculability. This disease is sometimes mistaken for chancre. Darkfield examinations, repeated for 3 or 4 days if necessary, on lesions may determine absence of or coexisting syphilis. No local antiseptics should be used when dark-field studies are to be made. If the physician does not have a darkfield microscope available, sera may be sent in special containers obtainable from the State Laboratory for "delayed" darkfield examinations.

In addition to the fairly characteristic clinical appearance, the use of the Ducrey skin test is helpful in making a diagnosis of chancroid. The test is made by injecting intradermally 0.1 cc. Ducrey vaccine, and reading the results in 48 to 72 hours. An induration (wheal) of 6 mm. or more is interpreted as positive. As treatment or cure of the disease does not reverse the test, it must be interpreted as past or present chancroidal disease. The test is usually negative for the first 2 weeks of the disease. The Ducrey streptobacillus may be demonstrated in a direct smear from the lesion. Inguinal buboes usually follow the initial lesion in about 2 weeks. They are painful, inflammatory, and may soon fluctuate and rupture. They should never be incised, but aspirated if fluctuant.

Sulfathiazole is specific for chancroid. It is given in 1 Gm. doses 4 times a day for 5 to 7

days. This will effect a cure in most cases. A second course may be necessary. Local cleanliness with use of hydrogen peroxide, 1:3000 potassium permanganate, and sulfanilamide powder are recommended.

All cases of chancroid are infectious, and all sex contacts since 2 weeks before the onset should be examined to determine the source and possible spread of the disease.

Lymphogranuloma Venereum

Lymphogranuloma venereum, or lymphopothia venereum, is caused by a filtrable virus, and is essentially a venereal disease involving the regional lymphatics. Inflammatory buboes, with fluctuation or rupture are frequently all that is seen. Primary lesions are usually slight and transitory, and are often overlooked even by the patient. In some cases secondary ulceration occur. Elephantiasis is often a result of this disease, and rectal stricture follows involvement of the perirectal lymph nodes.

The Frei test is a reliable diagnostic aid. This test is made by the intradermal injection of 0.1 cc. of the antigen and reading the results in 48 to 72 hours. The antigen is made from pus of the human bubo, mouse-brain culture, or chick embryo culture. Numerous investigators have shown that the antigen of chick embryo origin gives the most uniform and reliable results. The test becomes positive after 2 or 3 weeks of the disease, and is not reversed by treatment or cure. An induration of 6 mm. is considered positive for past or present lymphogranuloma venereum.

Sulfathiazole is a specific for the early manifestations. It is given in 1 Gm. doses 4 times a day for 5 to 7 days, with 5 to 7 days rest, and repeated if necessary.

All cases are infectious. Contacts for thirty days before appearance of the bubo, and since appearance, should be examined and treated if infected.

Granuloma Inguinale

Granuloma inguinale is a chronic venereal disease of low infectiousness, characterized by beefy-red, raised, granulating lesions, usually genital or perianal. These lesions are sometimes mistaken for cancerous, tuberculous, or syphilitic (gummata) lesions.

In addition to its characteristic clinical appearance, Donovan's bodies may be found in the granulations. A small bit may be pinched off near the edge of the lesion and crushed between two glass slides, and stained with Wright's stain, and examined, or sent to the State Laboratory for examination.

This is a chronic disease and responds slowly to treatment. Fuadin in 5 cc. doses intramuscularly twice a week is the treatment of choice. Injections must be prolonged for 2 months after apparent cure, as there is a tendency to recurrence. Local cleanliness, and the use of zinc peroxide or 1:3000 potassium permanganate are helpful.

The U. S. P. H. S. medical centers in Georgia

previously mentioned will accept most cases of treated or untreated infectious venereal diseases for treatment without cost, and if desired contact your local health department or the State Department of Health, Division of Venereal Disease Control.

MALCOLM M. NEEL, M.D.,
Associate Director,
Division of Venereal Disease Control.

REFERENCE

Special Committee of the American Neisserian Medical Society: The Management of Gonorrhea in General Practice; V. D. I. (May) 1943.

COUNTIES REPORTING FOR 1944

Brooks County Medical Society

The Brooks County Medical Society announces the following officers for 1944:

President—A. B. Jones, Jr., Quitman
Vice-President—L. A. Smith, Quitman
Secretary-Treasurer—Harry A. Wasden, Quitman

Emanuel County Medical Society

The Emanuel County Medical Society announces the following officers for 1944:

President—J. H. Chandler, Swainsboro
Vice-President—S. S. Youmans, Swainsboro
Secretary-Treasurer—D. D. Smith, Swainsboro
Delegate—J. H. Chandler, Swainsboro

Cobb County Medical Society

The Cobb County Medical Society announces the following officers for 1944:

President—M. N. McCall, Acworth
Vice-President—G. O. Allen, Marietta
Secretary-Treasurer—W. C. Mitchell, Smyrna
Delegate—R. W. Fowler, Marietta
Alternate Delegate—W. C. Mitchell, Smyrna

Hancock County Medical Society

The Hancock County Medical Society announces the following officers for 1944:

President—Horace Darden, Sparta
Secretary-Treasurer—H. L. Earl, Sparta
Delegate—C. S. Jernigan, Sparta

Spalding County Medical Society

The Spalding County Medical Society announces the following officers for 1944:

President—W. C. Miles, Griffin
Vice-President—T. I. Hawkins, Griffin
Secretary-Treasurer—T. O. Vinson, Griffin
Delegate—G. L. Walker, Griffin
Alternate Delegate—T. O. Vinson, Griffin

Blue Ridge Medical Society

The Blue Ridge Medical Society announces the following officers for 1944:

President—E. W. Watkins, Ellijay
Vice-President—W. C. Chastain, Ellijay
Secretary-Treasurer—C. B. Crawford, Blue Ridge
Delegate—C. B. Crawford, Blue Ridge
Alternate Delegate—Geo. R. O'Daniel, Blue Ridge

Bulloch-Candler-Evans Counties Medical Society

The Bulloch-Candler-Evans Counties Medical Society announces the following officers for 1944:

President—R. L. Kennedy, Metter
Secretary-Treasurer—W. E. Simmons, Metter

Habersham County Medical Society

The Habersham County Medical Society announces the following officers for 1944:

President—J. B. Jackson, Clarkesville
Vice-President—Bruce Swain, Clarkesville
Secretary-Treasurer—T. H. Brabson, Cornelia
Delegate—D. H. Garrison, Clarkesville
Alternate Delegate—O. N. Harden, Cornelia

Douglas County Medical Society

The Douglas County Medical Society announces the following officers for 1944:

President—T. B. Taylor, Douglasville
Vice-President—J. G. Bussey, Douglasville
Secretary-Treasurer—C. V. Vansant, Douglasville

Warren County Medical Society

The Warren County Medical Society announces the following officers for 1944:

President—H. B. Cason, Warrenton
Vice-President—F. L. Ware, Warrenton
Secretary-Treasurer—A. W. Davis, Warrenton
Delegate—H. B. Cason, Warrenton
Alternate Delegate—A. W. Davis, Warrenton

Dougherty County Medical Society

The Dougherty County Medical Society announces the following officers for 1944:

President—Phil E. Roberson, Albany
Vice-President—J. A. Redfearn, Albany
Secretary-Treasurer—I. M. Lucas, Albany
Delegate—Phil E. Roberson, Albany
Alternate Delegate—I. M. Lucas, Albany

Clayton-Fayette Counties Medical Society

The Clayton-Fayette Counties Medical Society announces the following officers for 1944:

President—J. R. Wallis, Lovejoy
Secretary-Treasurer—T. J. Busey, Fayetteville

Bartow County Medical Society

The Bartow County Medical Society announces the following officers for 1944:

President—S. M. Howell, Cartersville
Vice-President—W. E. Wofford, Cartersville
Secretary-Treasurer—A. L. Horton, Cartersville
Delegate—W. E. Wofford, Cartersville

Floyd County Medical Society

The Floyd County Medical Society announces the following officers for 1944:

President—Oliver Jenkins, Lindale
Vice-President—G. W. H. Cheney, Rome
Secretary-Treasurer—Inman Smith, Rome
Delegate—Harry Dawson, Shannon
Alternate Delegate—R. C. Maddox, Rome

Bibb County Medical Society

The Bibb County Medical Society announces the following officers for 1944:

President—A. M. Phillips, Macon
President-Elect—James B. Kay, Byron
Vice-President—W. W. Baxley, Macon
Secretary-Treasurer—R. W. Edenfield, Macon
Delegate—J. A. Fountain, Macon
Delegate—A. M. Phillips, Macon
Alternate Delegate—W. W. Chrisman, Macon
Alternate Delegate—H. G. Weaver, Macon

Jenkins County Medical Society

The Jenkins County Medical Society announces the following officers for 1944:

President—Henry G. Lee, Millen
Vice-President—Cleveland Thompson, Millen
Secretary-Treasurer—Q. A. Mulkey, Millen
Delegate—Henry G. Lee, Millen

Whitfield County Medical Society

The Whitfield County Medical Society announces the following officers for 1944:

President—C. F. Engelking, Dalton
Vice-President—Jas. R. Whitley, Dalton
Secretary-Treasurer—H. J. Ault, Dalton
Delegate—Trammell Starr, Dalton
Alternate Delegate—H. L. Erwin, Dalton

Wilcox County Medical Society

The Wilcox County Medical Society announces the following officers for 1944:

President—V. L. Harris, Rochelle
Secretary-Treasurer—S. B. Ellis, Pitts
Delegate—J. D. Owens, Rochelle
Alternate Delegate—J. M. Estes, Abbeville

Thomas County Medical Society

The Thomas County Medical Society announces the following officers for 1944:

President—Herbert F. Readling, Thomasville
Vice-President—J. N. Isler, Meigs
Secretary-Treasurer—Mary J. Erickson, Thomasville

Hall County Medical Society

The Hall County Medical Society announces the following officers for 1944:

President—Jesse L. Meeks, Gainesville
Vice-President—W. B. Harrison, Gainesville
Secretary-Treasurer—H. H. Lancaster, Gainesville
Delegate—C. D. Welchel, Gainesville
Alternate Delegate—B. B. Davis, Gainesville

Baldwin County Medical Society

The Baldwin County Medical Society announces the following officers for 1944:

President—W. A. Bostick, Milledgeville
Vice-President—E. Y. Walker, Milledgeville
Secretary-Treasurer—Z. S. Sikes, Milledgeville
Delegate—C. B. Fulghum, Milledgeville
Alternate Delegate—T. C. Clodfelter, Milledgeville

Tattnall County Medical Society

The Tattnall County Medical Society announces the following officers for 1944:

President—J. C. Collins, Collins
Vice-President—G. W. Tootle, Glennville
Secretary-Treasurer—J. M. Hughes, Glennville
Delegate—L. V. Strickland, Cobbtown

Burke County Medical Society

The Burke County Medical Society announces the following officers for 1944:

President—H. F. Bent, Midville
Vice-President—W. W. Hillis, Sardis
Secretary-Treasurer—W. D. Lundquist, Waynesboro
Delegate—W. R. Lowe, Midville
Alternate Delegate—J. M. Byne, Jr., Waynesboro

Greene County Medical Society

The Greene County Medical Society announces the following officers for 1944:

President—Goodwin Gheesling, Greensboro
Vice-President—W. Hill Lewis, Siloam
Secretary-Treasurer—F. H. Killam, Greensboro
Delegate—W. R. Richards, Greensboro

Tift County Medical Society

The Tift County Medical Society announces the following officers for 1944:

President—F. B. Pickett, Ty Ty
Vice-President—D. B. Harrell, Tifton
Secretary-Treasurer—M. L. Webb, Tifton
Delegate—C. S. Pittman, Tifton
Alternate Delegate—D. B. Harrell, Tifton

Jackson-Barrow Counties Medical Society

The Jackson-Barrow Counties Medical Society announces the following officers for 1944:

President—E. R. Harris, Winder
Vice-President—J. H. Campbell, Commerce
Secretary-Treasurer—A. A. Rogers, Commerce
Delegate—W. T. Randolph, Winder
Alternate Delegate—A. A. Rogers, Commerce

Carroll County Medical Society

The Carroll County Medical Society announces the following officers for 1944:

President—J. W. Watts, Bowdon
Vice-President—J. E. Powell, Villa Rica
Secretary-Treasurer—H. L. Barker, Carrollton
Delegate—S. F. Scales, Carrollton
Alternate Delegate—J. W. Watts, Bowdon

Muscogee County Medical Society

The Muscogee County Medical Society announces the following officers for 1944:

President—D. R. Venable, Columbus
Vice-President—J. L. Spikes, Columbus
Secretary-Treasurer—Leon Lapides, Columbus
Delegate—W. R. Jones, Columbus
Alternate Delegate—Hugh Bickerstaff, Columbus

Troup County Medical Society

The Troup County Medical Society announces the following officers for 1944:

President—W. P. Phillips, LaGrange
Vice-President—Thos. N. Freeman, LaGrange
Secretary-Treasurer—C. Mark Whitehead, LaGrange
Delegate—S. C. Rutland, LaGrange
Alternate Delegate—W. H. Clark, LaGrange

Glynn County Medical Society

The Glynn County Medical Society announces the following officers for 1944:

President—T. V. Willis, Brunswick
Vice-President—M. E. Winchester, Brunswick
Secretary-Treasurer—

NEWS ITEMS

Titles of articles published in the February 17 issue of The Bulletin of the Fulton County Medical Society were: "President's Message" by Dr. Ben H. Clifton; "Obstructive Jaundice" (abstract), Dr. Joseph C. Read; "Laboratory Tests in the Study of Jaundice," Eleanor W. Townsend; "Hemolytic Jaundice," Dr. Roy R. Kracke; "Nutrition Clinic Sponsored by the Department of Public Health," Dr. McClaren Johnson; "Social Hygiene Conference and other news items.

The Bulletin of the Fulton County Medical Society published January 20 carries a complete roster of officers of the Fulton County Medical Society, also list of committees and names of committee members. Articles published in The Bulletin were: "A letter to the Members" by the Editor, Dr. Eustace A. Allen; "Address of the President" by Dr. Ben H. Clifton; "Thirty-Ninth Annual Banquet"; "Report of the Committee on the Dr. L. C. Fischer Awards"; "Presentation of the President's Key" by Dr. Colhoun McDougall; Dr. "Edgar Garrison Ballenger" by Dr. Marion C. Pruitt.

The medical and surgical staff of the Georgia Baptist Hospital, Atlanta, was entertained at a banquet in the Nurses' Home dining room by the Hospital Commission January 18. Dr. James W. Middleton, pastor of the First Baptist Church, Atlanta, was the speaker of the evening.

The Bibb County Medical Society held a business meeting at Ridley Hall, Macon, January 18.

Coker's Hospital, Canton, announces that Dr. James Mashburn has joined its staff.

Dr. Ben H. Clifton, Atlanta, president of the Fulton County Medical Society, spoke before a meeting of the Woman's Auxiliary at the Academy of Medicine January 7.

The Georgia Medical Society, Savannah, met January 11. Dr. Austin V. Deibert, senior surgeon, United States P. H. S., read a paper entitled "Recent Advances in the Therapy of Syphilis—Illustrated with Colored Lantern Slides"; Dr. J. K. Quattlebaum reported a case, "The Callander Amputation and Refrigeration Anesthesia."

Dr. and Mrs. Geo. B. Smith, Rome, entertained at a buffet supper in honor of Dr. and Mrs. Lester Harbin January 19. Others who entertained for them were Mrs. Robert Norton, sister of Dr. Harbin; Mr. and Mrs. Charles Warner, Jr., Mr. and Mrs. Ralph Rish.

Dr. James E. Paullin, Atlanta, president of the American Medical Association, has been appointed to assist in a survey of the Navy manpower group; and to study Naval hospitals and dispensaries of the Sixth Naval District.

The Georgia Medical Society, Savannah, met at the Society's Hall, January 25. Dr. Eric C. Johnson, Marine Hospital, read a paper entitled "The Diagnosis of Surgical Diseases of the Kidneys—Illustrated with Colored Lantern Slides"; Dr. Robert Drane reported a case, "Milk of Calcium Bile."

Dr. L. P. Holmes, Augusta, was elected director of the Physicians and Dentists Business Bureau, January 11.

Major Harry E. Talmadge, M.C., Athens, has been elected to Fellowship in the American College of Surgeons. He is on detached service at the Mayo Foundation Clinic, Rochester, Minn.

Dr. Jas. L. Pittman, Atlanta, has been elected president of the medical staff of Emory University School of Medicine for 1944.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, February 3. The scientific program consisted of a "Symposium on Jaundice." Dr. Eleanor Townsend read a paper entitled "Laboratory Tests in the Study of Jaundice, with Particular Reference to Liver Function Tests"; Dr. Jos. C. Read, "Obstructive Jaundice"; Dr. Paul B. Beeson, "Infective Jaundice"; Dr. Roy R. Kracke, "Hemolytic Jaundice"; The leading articles published in The Bulletin of the Fulton County Medical Society, February 3, were the "President's Message" by Dr. Ben H. Clifton. Dr. Lon Grove wrote on "Gastrocolic Fistula with Presentation of Patients"; Major Joseph J. Wallace, M. C., Chief Medical Section, Lawson General Hospital, "Lymphomas."

The Bibb County Medical Society met in Ridley Hall, Macon, February 1. Dr. Max Mass read a paper entitled "Historical Aspects of Pathology."

The Ware County Medical Society met at the Ware Hotel, Waycross, February 2. The physicians of Blackshear were hosts at dinner. Dr. Arly J. Arlon, of Camp Stewart, read a paper on "Chronic Non-Tuberculosis Arthritis."

The Georgia Medical Society, Savannah, met at the Savannah Hotel, February 8. All members of the society and those physicians in the armed forces were urged to attend the Annual President's dinner.

The Fulton County Medical Society will begin its once a month meetings on March 2. Meetings will be held every first Thursday night until further notice. The scientific program will consist of a "Symposium on Diarrhea," discussed by Lt. Col. Perry T. Hough, M.C., Lawson General Hospital, Atlanta; names of other Atlanta physicians participating are: Dr. T. Irwin Wiltingham, Dr. McClaren Johnson, Dr. Floyd W. McRae, and Dr. Jas. J. Clark.

A CORRECTION

In a recent communication sent to you entitled "The Pharmacopoeia Goes to War," on the second page, second paragraph, where reference was made to the addition to the Pharmacopoeia of new drugs of the sulfanilamide group, mention is made of some of these drugs being used in the treatment of "amoebic dysentery." This should, of course, have read "bacillary dysentery."

Please make this change in the copy, should you reprint this Pharmacopoeial release.

E. FULLERTON COOK,
General Chairman of the
U.S.P. Committee of Revision

January 31, 1944
43rd Street and Woodland Avenue
Philadelphia 4, Penna.

OBITUARY

Dr. Roy Albert Hill, Thomasville; member; Emory University School of Medicine, Emory University, 1915; aged 55; died January 1, 1944, just after he reached the residence of a patient. A call was transmitted to Thomasville for Dr. Charley K. Wall, but his condition was beyond relief when Dr. Wall reached him. Dr. Hill served as an intern in a New York City hospital, then served as major in the medical corps of the U. S. Army in France during World War I. He was a native of Pelham and moved to Thomasville about one year after World War I. He had a wonderful personality and exceptional medical skill. His practice extended over a large area of South Georgia and North Florida. Dr. Hill was a member of the Thomas County Medical Society, Second District Medical Society, fellow of the American College of Physicians and the American Medical Association. Surviving him is his widow, the former Miss Bessie Roberts. Rev. R. T. Gillespie officiated at the funeral services conducted at the home. The body was cremated in Macon.

Dr. Rufus Lynn Grier, Lumpkin; Emory University School of Medicine, Emory University, 1901; aged 77; died December 11, 1943. He was a native of Randolph County, moved to Stewart County in 1902 and practiced medicine until disabled. Many friends were endeared to him by his kindness and loyalty. Surviving him are his widow and two children, Mrs. E. H. Tanner, Sylva, and Lynn Perry Grier, Huntsville, Alabama. Rev. W. W. Whaley officiated at the funeral services conducted at the Lumpkin Methodist Church.

Dr. James F. Webb, Decatur; Emory University School of Medicine, Emory University, 1869; aged 95; died December 28, 1943. He was a native of Whigham and served in Wheeler's Cavalry in the War Between the States. After he graduated in medicine he took post-graduate work at Tulane University of Louisiana School of Medicine, New Orleans, La., and at the Lying-in Hospital, New York City. He had many warm friends. Surviving him are four daughters, Mrs. T. S. Hopkins, Brunswick; Mrs. Berta Medler, Tampa, Fla.; Mrs. D. D. McMaster, and Mrs. J. B. Richards, both of Decatur; four sons, W. H. Webb, Decatur; W. F. and P. A. Webb, Sr., both of Atlanta; and R. R. Webb, Macon. Rev. Geo. M. Acree officiated at the funeral services conducted at Spring Hill Chapel. Burial was in Hollywood Cemetery.

Dr. Thomas Hill Stewart, Jr., Eastman; member; Emory University School of Medicine, Emory University, 1914; aged 51; died January 7, 1944, while on a visit to see relatives in Savannah. He was formerly stationed at Fort Screven, Chatham County, and since retired as an army officer. Later he served as health officer for Bleckley, Dodge and Pulaski counties, then moved to Eastman and became associated with Dr. J. Cox Wall, Eastman, in the operation of a clinic. After Dr. Wall's death he was affiliated with Dr. Warren A. Coleman in the operation of the Coleman Hospital. Surviving him are his widow and two sons, both of whom are officers in the U. S. Army and in foreign service.

Dr. Joseph Akerman, Augusta; member; Johns Hopkins University School of Medicine, Baltimore, Md., 1900; aged 71; died December 5, 1943, of heart disease. He wrote several treatises on sanitary laws which he described as forerunners of public health laws. Dr. Akerman was professor of obstetrics at the University of Georgia School of Medicine for 28 years, since 1915. He was a conscientious and thoroughly capable practitioner and teacher. Surviving him are his widow, two sons, Ben Akerman, Atlanta, and Joseph Akerman, Chippens Falls, Wis.; two daughters, Mrs. J. D. Withrow, Kenly, N. C., and Mrs. Laura Akerman, Augusta.

Dr. Henry Richmond Slack, LaGrange; member; Emory University School of Medicine, Emory University, 1891; aged 81; died January 16, 1944, in an Atlanta hospital. He was born in Rosedale, Louisiana, and moved with his parents in early youth to LaGrange. Dr. Slack took the initiative in many worthy undertakings and was remarkably successful. He was a promoter and co-founder of the Dunson Hospital at LaGrange, cofounder and president for many years of the Georgia Pasteur Institute, Atlanta, served on the Board for the Revision of the United States Pharmacopeia for 40 years. He was active in public school work, member of the Troup County Medical Society, American Medical Association and the LaGrange Presbyterian Church. Surviving him are two daughters, Mrs. Hazen Smith, assistant dean of the Department for Women at Duke University, Durham, N. C., and Mrs. Scroop Hooker, Paterson, N. J.; two sons, S. B. Slack, Decatur, and Dr. H. R. Slack, Baltimore, Md. Rev. Henry Edward Russell officiated at the First Presbyterian Church. Burial was in Hillview Cemetery.

Dr. Edward J. Dorminy, Fitzgerald; member; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md., 1890; aged 76; died January 14, 1944. He was born in Irwin County. After Dr. Dorminy graduated in medicine, he took post-graduate work at Johns Hopkins University School of Medicine, also at the New York Polyclinic Medical School and Hospital, New York. He began practice in Irwin County, then moved to Telfair County where he practiced for a few years; then moved to Fitzgerald. His greatest enthusiasm was always aroused in treating patients with malaria in which he was most successful; other doctors located in Ben Hill County recognized his ability and called him for consultations continuously. He served as representative in the Legislature from Irwin County, also Ben Hill County, then as State Senator from the 45th District. He served as chairman, director or president of many civic and business organizations, and one time steward of the Central Methodist Church. Surviving him are his widow, one daughter, Mrs. Bob Ware. Rev. W. E. Scott and Rev. P. H. Anderson, Jr., officiated at the funeral services. Interment was in Evergreen Cemetery.

Dr. Novatus Lee Barker, West Point; member; Emory University School of Medicine, Emory University, 1917; aged 79; died January 19, 1944, at the home of his daughter, Mrs. T. L. Hollingsworth, Knoxville, Tenn.

For years Dr. Barker was associated with the late Dr. E. Bates Block, of Atlanta, in the practice of psychiatry and neurology; later he practiced at Eastman, then moved to West Point where he practiced until he retired. He was a member of the Troup County Medical Society and the Methodist Church. Surviving him are three daughters, Mrs. T. L. Hollingsworth, Knoxville, Tenn.; Mrs. Connor Henry, Atlanta, and Mrs. Ed Coyle, Jr., Chattanooga, Tenn.; three sons, Novatus L. Barker, Jr., West Point; T. L. Barker, Anniston, Ala.; and George Barker, Bunkie, La. Rev. George L. King officiated at the funeral services conducted at the graveside. Burial was in West Point Cemetery.

Dr. Leon R. McCrummen, LaGrange; member; Atlanta College of Physicians and Surgeons, Atlanta, 1909; aged 63; died January 15, 1944. He was city physician for LaGrange. Dr. McCrummen was a loyal physician, member of the Troup County Medical Society and one of the State's best citizens. Surviving him are his widow, one daughter, Mrs. R. L. Ogletree, West Point. Rev. C. S. Forester and Rev. George L. King officiated at the funeral services.

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The eighth annual meeting of The New Orleans Graduate Medical Assembly will be held this year March 6-9. This organization has grown by leaps and bounds. More than four hundred out-of-state visitors attended last year's session than had ever attended before. Many of these men were in the armed services and came from all over the United States. Twenty-seven different states as well as the District of Columbia were represented. There was a slight diminution in the number of local members who attended due to the fact that many of them are in the Army or Navy.

The program this year is fully equal to that of last year and of previous years. A large number of guest speakers of distinction and renown have accepted the invitations to appear on the program of this meeting. They include such men as Dr. Chevalier L. Jackson, the father of bronchoscopy; Dr. Robert L. Levy, Professor of Clinical Medicine at Columbia; Dr. Walter L. Palmer, Professor of Medicine, University of Chicago; Dr. Ralph H. Major, Professor of Medicine at the University of Kansas School of Medicine; Dr. Paul R. Cannon, head of the Department of Pathology at the University of Chicago and Dr. Abraham Myerson, Clinical Professor of Psychiatry at Harvard Medical School. In the field of surgery are to be found such speakers as Commander L. Kraeer Ferguson, Assistant Professor of Surgery at the University of Pennsylvania; Dr. George T. Pack, Associate Professor of Clinical Surgery at Cornell University. In Proctology Dr. Louis A. Buie, Chief of Department of Proctology at the Mayo Clinic, will discuss the problems in this particular field. In orthopedic surgery, Dr. H. Winnett Orr, well known for his method of treatment of bone fractures, will give several papers. In obstetrics Dr. John W. Harris, Professor of Obstetrics and Gynecology at the University of Wisconsin Medical School, and Dr. Robert A. Ross, Associate Professor of Obstetrics at Duke University,

will have papers on the gynecologic and obstetrical conditions. Dr. Carroll S. Wright, Professor of Dermatology and Syphilology at Temple University School of Medicine, will represent the specialty of dermatology, and Dr. Frank Hinman, Clinical Professor of Urology at the University of California Medical School, will give instructive talks on their particular field of medicine. Altogether the list of speakers is outstanding and to hear them will well repay those who register and attend the meeting.

The members of The New Orleans Graduate Medical Assembly will welcome visitors and speakers at this annual convention. It is to be hoped that the attendance will equal that of last year. It is particularly desired that the members of Army and Navy installations in Louisiana and Mississippi, or in fact any nearby state will feel welcome to attend the meeting.

DAILY MILK FEEDS

Where shortage of food products exist in industrial areas, greater attention and care must be given to the use of proper combinations of foods to prevent malnutrition among workers. The daily milk requirements, so necessary in these days to protect our diets, can best be met with the supplies available when the various dairy products are used in combinations. These dairy food products are good sources of calcium, phosphorus and high quality proteins. This information is issued by the consumer relations department of the Borden Company.

To insure adequate amounts of milk in the diet, nutritionists recommended that part of the daily milk needs be used in the fluid form as a beverage. Fluid milk also may be used with cereals, in soups, chowders, scalloped or creamed dishes and desserts.

Ice cream contains all of the food value of milk, although in different proportions. One-third (1½ cups) of vanilla ice cream is equivalent in calcium, phosphorus and protein content to one cup of fluid whole milk. Ice cream, too, is a perfect choice for those who are over-weight because it is a low caloric dessert while high in health values.

One and one-fourth ounces of American (Cheddar) cheese are equivalent in calcium, phosphorus and protein content to one cup of fluid whole milk. Cheese may be used in soups, main dishes, sandwiches, salads and desserts.

Equal volumes of buttermilk, fluid skim milk and fluid whole milk contain equivalent amounts of calcium, phosphorus and protein. However, as practically all of the butterfat has been removed from skim milk and many of the buttermilks, these two products are low in calories and vitamin A value. One cup of buttermilk, or fluid skim milk, plus 2¼ teaspoons of butter will furnish about the same food value as one cup of whole milk.

Four tablespoons of dry whole milk combined with ¾ cup of water are equivalent in food value to one cup of fluid whole milk. Dry whole milk, when reconstituted with water, may be used for all purposes for which fluid whole milk is used. The reduced volume of the dry milk powder offers a way of increasing the

nutritive value of many cooked dishes without adding large volumes of liquid.

One-half cup of evaporated milk, diluted with an equal volume of water, is equivalent in food value to one cup of fluid whole milk. It may be used for general cooking purposes, cocoa and hot chocolate, and with coffee or tea. One-half cup of condensed milk, diluted with an equal volume of water, is equivalent in food value to one cup of fluid whole milk except for the caloric content. The caloric content of the diluted condensed milk is about double that of an equal volume of fluid whole milk because of the sugar added during processing. Condensed milk may be used in the preparation of many delicious dishes.

Three and one-half tablespoons of dry skim milk combined with fifteen tablespoons of water are equal in calcium, phosphorus, and protein content to one cup of fluid milk. If supplemented with $2\frac{1}{4}$ teaspoons of butter, it is equivalent to the total food value of one cup of fluid whole milk.

Suggested Combinations

(Food value equivalent to 1 quart fluid whole milk)

Fluid Whole Milk.....	3 cups
Ice Cream	$1\frac{1}{6}$ quart
American cheese	$\frac{3}{4}$ ounce

* *

Fluid Whole Milk.....	2 cups
Ice Cream	$1\frac{1}{6}$ quart
American cheese	$1\frac{1}{4}$ ounces
Evaporated milk	$\frac{1}{4}$ cup

* *

Fluid Whole milk.....	1 cup
Buttermilk	1 cup
Dry Skim Milk.....	$3\frac{1}{2}$ tablespoons
Butter	$4\frac{1}{2}$ teaspoons
Evaporated milk	$\frac{1}{2}$ cup

These suggested combinations should be of considerable value to the consumer.

U. S. PENICILLIN OUTPUT RISES 6000% IN 7 MONTHS

KINGSTON, ONT., Jan. 17—Production of penicillin in the United States during January will be approximately 6,000 per cent higher than during June, 1943, it was disclosed tonight (Monday) by Dr. Theodore G. Klumpp, president of Winthrop Chemical Company, New York, in an address before the Aesculapian Society of Queens University here.

Indicative of the continuing rise in penicillin output, Dr. Klumpp said that January production would exceed that of the previous month by 40 per cent.

"The exact amount of penicillin being produced in the United States is a military secret," Dr. Klumpp said, but despite the 'spectacular increases during the past eleven months it is not yet sufficient for our estimated minimum national requirements, including both civilian and military."

Estimates of total American requirements vary great-

ly, Dr. Klumpp pointed out, ranging from 42 billion units of penicillin per month to as much as 600 billion units.

Manufacturing Facilities

Dr. Klumpp noted that early in 1943 "there were approximately five firms producing small amounts of penicillin in the United States. Manufacturing experience at that time indicated that the drug could be produced on a substantial scale at a cost that would not be prohibitive. The Army and Navy decided that they wanted increased amounts of the drug and in cooperation, the War Production Board decided to give high priorities for equipment and materials required for its manufacture.

"Fourteen additional concerns, and perhaps some others, began during 1943 preparations for its manufacture of the mold extract. On July 9, 1943, the War Production Board placed the distribution of the drug under rigid allocation, and all penicillin produced, even that used for chemical and pharmacological research, became subject to War Production Board allocation.

"There is not yet enough penicillin to meet all demands, but in the United States today all suitable critical cases not amenable to other forms of therapy are able to obtain the treatment."

Dr. Klumpp said definitely that penicillin had not yet been synthesized, "but we know that the structure of penicillin is complex and we know enough about it to be able to say that the task of synthesizing it will be extraordinarily difficult. However, the cost of producing the drug biologically has declined, so that it is now evident that it can be so produced at a cost that will be within the reach of those who need it."

U. S. Requirements

In discussing the estimates of American requirements, Dr. Klumpp said "there are too many imponderables in the picture to make such estimates anything more than a guess at this time. It is estimated that anywhere from 200,000 to 1,000,000 units per case will be used, and the guesses run all the way from a minimum of 42 billion to a maximum of 600 billion units per month as the requirements for the United States. Assuming that the average dose per case will be 300,000 units, I believe that 450 billion units per month will meet our national requirement. Of course, in arriving at these figures, many assumptions have had to be made, and the figures, therefore, are very 'iffy.'"

Penicillin and Sulfa Drugs

Compared with the sulfonamides, Dr. Klumpp told the Aesculapian Society, penicillin therapy presents many advantages and some disadvantages. "To a large extent, the sulfonamide compounds are inactivated by certain tissue products and by pus," he continued. "Penicillin, however, is almost equally efficacious in the presence of pus. It acts far more rapidly and powerfully than the sulfonamides on susceptible diseases. Lastly and most important, all sulfonamides have a definite toxicity for the patient as well as for the invading organism; penicillin has almost no toxicity. Thera-

peutic doses have been given to hundreds of patients without any serious deleterious effects.

Penicillin's Future

"The preoccupation of the scientific staffs of pharmaceutical houses in solving the problems related to the increasing production of penicillin and the multiplicity of demands made upon scientific facilities of our universities and research institutions by the war, have not prevented a purposeful search for new biologic extracts which may be even more powerful than penicillin or which may have a wider range of activity. Already there have been discovered at least two substances—clavacin isolated from culture of *Aspergillus clavatus* and flavicin from *Aspergillus flavus*—which show promising antibacterial properties. Although these have not yet been used clinically, from experimental studies they appear to destroy other species of pathogenic bacteria which are resistant to the action of penicillin.

"Just as sulfonamide compounds, having a progressively wider range of activity, were rapidly developed following the discovery of Prontosil, so the advent of penicillin opens the door to another era in chemotherapy. Penicillin is not the end, but the beginning. The first firm step has been taken; the horizon is limitless."

ATABRINE FOR ARMED FORCES

The importance of atabrine to the armed forces is highlighted by a telegram from Major Gen. Norman T. Kirk, surgeon general of the United States Army, to Winthrop Chemical Company.

"Reports from war fronts testify to the importance of Atabrine which has proven an excellent substitution for quinine in the treatment and prophylaxis of malaria," General Kirk's telegram said. "This product has filled a need of the Medical Corps and is responsible not only for the saving of lives but assistance in the maintenance of health of our troops. You may be proud of your contribution in the development of Atabrine."

Winthrop's research made possible the production of Atabrine entirely from materials available in the United States. Its own output of this drug is now 300 times greater than this country's annual prewar demand; in addition, Winthrop has issued to ten other pharmaceutical and chemical companies royalty-free licenses for the production of Atabrine for the armed forces.

COLORFILMS

The motion picture in color, "Continuous Caudal Analgesia in Obstetrics," which was made available by Eli Lilly and Company, Indianapolis, for showing before medical societies and hospital staffs, has been in continuous demand since release several months ago. It was made at the U. S. Marine Hospital, Staten Island, by authorization of the Surgeon General, U. S. Public Health Service, and the demonstrations were carried out by Drs. Hingson and Edwards, originators of the technic.

The three films that were made at the Nutrition Clinic

of the University of Cincinnati in the Hillman Hospital, Birmingham, Alabama, under the joint auspices of the Department of Internal Medicine at the University of Cincinnati and the University Hospitals of Cleveland have likewise been in constant circulation. One of these deals with thiamin chloride deficiency, one with nicotinic acid deficiency, and the third with ariboflavinosis.

None of the films contains advertising. They are available to physicians for showing before medical societies and hospital staffs.

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THE COMPLICATIONS OF CORONARY THROMBOSIS

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Chicago

There is an old medical tradition that any patient's symptoms should be explained by a single diagnosis. Upon this basis one might presume that the complications of acute coronary thrombosis would be limited to those of the heart and vascular system. Disease entities of noncardiac nature should be absent or relatively infrequent. A study of the autopsy records in any hospital would quickly dispel any such assumption. The character of the associated pathologic lesions (noncardiac) in these protocols are varied and many. While some of them were asymptomatic, most were responsible for active symptoms during the course of the coronary disease. They distorted the symptoms by obscuring the diagnosis. A concrete example is that of a patient recently entering our hospital, who had been examined by one physician at home and classified as a coronary thrombosis. A second physician made a tentative diagnosis of an acute cholecystitis and gallstone colic. Death occurred within a few days of the onset of symptoms, and the autopsy showed both diagnoses to have been correct. The theme of this discourse is concerned with the more common complications of coronary thrombosis, cardiac and noncardiac.

It would be a waste of your time for me to present this information through a maze of statistical tables, as our aims are more practical. Suffice it to say, the material for this paper consists of the clinical records of over 500 patients with coronary throm-

bosis encountered in Chicago. These patients were studied for variable periods of time, before, during, and after the acute occlusion. Some were reviewed briefly in consultation, and too few were finally analyzed by autopsy. In age, they ranged from 22 to 90 years, males predominating over females, and nearly all were of the white race.

The complications which were related to the cardiovascular system were readily divisible into groups, concerned with disturbances of cardiac rhythm, heart block, structural defects of the heart muscle, valves, or pericardium, remote lesions of the blood vessels, particularly embolic phenomena; and those of cardiac failure, usually with edema.

Coronary arteriosclerosis and occlusion were frequently associated with other well known types of heart disease, of which hypertension was by far the most common. Rheumatic fever was frequently listed in the past history, and in the autopsy records scarring and fibrosis of the mitral or aortic valve were not uncommon. There were a few records where acute rheumatic myocarditis was suspected and the possibility of rheumatic coronary arteritis.

A more interesting valve lesion, and more rare, was the high grade calcification of the aortic valve. We have observed such patients during their period of hypertension, with no evidence of syphilis, develop the typical clinical findings of aortic regurgitation; a basal diastolic murmur, a fall in diastolic pressure, and the typical throb of the peripheral arteries. The calcification of the valve appeared to have proceeded as a part of the sclerotic process. The premise that an ancient rheumatic infection was a primary basis for the defect seemed unwarranted. The calcification of the coronary circuit was as marked as that of the valve

Guest speaker before the Ninety-Fourth Annual Session of the Medical Association of Georgia, Atlanta, May 12, 1943.

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ring with single or multiple infarcts.

Syphilis and syphilitic aortitis were also encountered, which probably is a purely coincidental issue. The conventional premise is that a positive Wassermann blood test, or a well-defined aortitis does not imply that a coronary thrombosis is of the same etiologic background.

Pulmonary heart disease, with emphysema, asthma, adhesive pleuritis, or defects of the bony thorax were also encountered but uncommon. Hypo—and hyperthyroidism were also present. Congenital defects were usually minor affairs, discovered at autopsy and were not of practical significance.

Although any type of heart disease may be associated with coronary sclerosis or occlusion, hypertension seems to predominate. The exact relationship of the hypertension to the coronary changes is not entirely clear. It has been suggested that they are two separate and independent diseases. Another theory suggests that the hypertrophied ventricular muscle of hypertension places unusual demands upon the coronary arteries, with resultant wear and tear causing sclerosis. Still others consider the coronary pathologic changes a distorted cholesterol metabolism as a part of the hypertensive process. There is little actual knowledge as to why the clot formation takes place which results in occlusion and infarction.

Cardiac insufficiency or ventricular muscular failure has been recorded by some observers in 1 case out of 5, but our experience shows a much lesser frequency. When it does appear it is a formidable complication, and particularly so when it occurs within a few days or weeks after the onset of acute occlusion. The diagnosis may be suspected if a record is made of the intake and output of fluids from the first day of an acute coronary thrombosis. At first the output of urine is only a few hundred cubic centimeters. As the patient stabilizes the output of urine gradually rises and a constant ratio of intake of fluid to output of urine becomes apparent. If the output of urine remains persistently low one may predict cardiac insufficiency before congestive findings appear in the lung bases, or before liver enlargement, or edema of

the extremities is apparent. Cardiac failure is a more common occurrence after the patient is out of bed during the convalescent period or during rehabilitation. The onset is often remarkably insidious but may be ushered in with dramatic episodes of nocturnal dyspnea or orthopnea. It is usually accompanied by persistent tachycardia, and occasionally the onset of auricular fibrillation may mark the beginning of failure.

The amount of edema fluid present in the lung bases, liver, lower extremities, or ascites or pleural effusion, may vary from a few pounds to as much as 50 or 60 pounds depending upon the length of time of accumulation.

At this time it should be mentioned that there are a number of patients, usually elderly ones, who present themselves with symptoms of decompensation who have never been classified as having an acute coronary occlusion. A careful history will often bring out a recent record of severe, prolonged heart pain, and dyspnea; and an electrocardiogram may show a characteristic deformity of coronary thrombosis demonstrating the true reason for their muscular failure. Such patients, if relieved of their edema and subjected to protracted bed rest, will recover considerable of their cardiac reserve, and recurrence of further episodes of failure may be avoided.

The early occurrence of muscular failure in our experience demands the immediate use of oxygen therapy, to tide the patient through the emergency. There are some cardiologists who advocate the routine prophylactic employment of oxygen in the first several days in acute coronary occlusion to prevent failure and other complications. There are no dogmatic rules as to the selection of method, tent, catheter, or mask. It has been our opinion that oxygen therapy is often a life saving measure, and is dramatic and in the control of dyspnea, orthopnea, restlessness and pain.

The choice of drugs in the treatment of cardiac insufficiency is more of a controversial nature. In those patients with a regular rhythm we have had best results with the use of a salt free diet, adequate sedation, ammonium chloride, and intravenous injection of small amounts (4

minims) of the organic mercurials — salyrgan or mercupurin — on alternate days. We try to avoid rapid diuresis and have found that elimination of more than 2 or 2.5 liters per day is detrimental to the patient's comfort and well-being. Digitalis has not been an effective diuretic in our experience except those in whom auricular fibrillation has been long established, and in those we employ it to control the irregularity and often supplement it with the intravenous mercurial for diuresis.

Aminophylline is often dramatic in controlling the emergencies of acute cardiac asthma, particularly when given intravenously, but as a diuretic for edema it has a limited use.

A common problem in the old coronary occlusion with decompensation is when to allow him out of bed and how much physical activity is warranted. This problem may be somewhat simplified if accurate records are kept of his intake and output of fluids. When these figures assume a constant ratio we usually consider we may safely get the patient out of bed for a daily weight record. When the patient is fully compensated his weight curve is practically level and every day the fluid intake and output maintain a rather constant ratio. If this record is maintained at bed rest for two weeks, physical activity may be started. The same record is utilized as the activity is slowly increased until the patient is rehabilitated. Decrease in output of urine, or weight gain immediately suggest recurrence of failure and retention of edema fluid.

The disturbances of the cardiac rhythm following coronary thrombosis are varied and many. By far the most common is that of ventricular premature systoles, commonly labeled extrasystoles. Presumptively the provocative stimulus of the premature systoles arises from or near the infarcted area. They may occur only occasionally or frequently, and they constitute the potentiality of paroxysmal ventricular tachycardia. If they arise from more than one foci most observers feel a more serious prognostic import is indicated. Ventricular fibrillation is fortunately reasonably uncommon, although it is probably the most

likely explanation of many of the sudden unexplained deaths at any time during the postocclusive period.

Quinidine has been the drug of choice in the control of any of the ventricular types of irregularity. Three grain doses twice or three times daily, when ventricular premature contractions occur, may be prophylactic therapy against more serious irregularities. If ventricular tachycardia does occur the use of quinidine sulfate intravenously is probably our best method of control. In former years the dose was limited to small amounts of 1 to 5 grains. Persistence of the activity of the ventricular pacemaker has led to much more formidable doses, up to 25 grains or more, administered slowly by the intravenous route. This level of dosage implies constant observation of the blood pressure, frequent electrocardiographic studies, and slow administration. The results have demonstrated the value of what formerly seemed heroic dosage. We have also employed oral quinidine therapy when premature contractions of the auricle occur, and in paroxysmal auricular fibrillation, with beneficial results. When auricular fibrillation occurs it is often transient and may terminate spontaneously with no serious effect, or may stop following the administration of an opiate, or oxygen therapy. If persistent for several hours, it has been our policy to use quinidine rather than digitalis. If persistent and uncontrolled, the time-honored digitalis therapy is the only alternative. The paroxysmal tachycardias of auricular and nodal origin are uncommon.

Heart block, either partial or complete, is occasionally encountered and is of serious significance. Theoretically it implies injury to the upper portion of the ventricular septum and the conduction system between the auricles and ventricles, but the autopsy findings do not always confirm the theoretical concept. Heart block as a complication is usually variable, with frequent shifts from one type to another; for example, a prolonged P-R interval at one time, a 2 to 1 block later in the day, or even complete block within the space of hours. No specific treatment has been developed.

Bundle-branch block, either right or left, will occasionally appear in the electrocardiographic tracings in acute coronary thrombosis. This pattern cannot be considered diagnostic of recent occlusion in itself, unless the change is known to be coincidental with the onset of the infarction. We have found that the bundle-branch block pattern is rather commonly a transient defect and if frequent serial tracings are made, the usual pattern of myocardial infarction will be demonstrable. Eventually the patient usually develops a permanent bundle-branch which can be shown in the electrocardiogram. Such changes from bundle-branch block to normal rhythm can often be recognized with the stethoscope at the bedside. When the bundle-branch lesion is present the heart tones are those of a peculiar pseudo gallop rhythm, with a reduplication of the first tone, which is quite different from the ordinary stethoscopic findings.

Emboli arising from clot formation on the inner surface of the ventricle over the infarcted area, are a constant possibility early or late in the course of coronary occlusion. They are often recognized when the symptoms are dramatic, but on many occasions remain undiagnosed until autopsy. Those from the right ventricle, usually the septum, lodge in the lung, with symptoms of orthopnea, pain, hemoptysis, and collapse. X-ray examination of the chest may be of aid in their recognition. When recurrent or large, they usually imply a fatal issue. In the systemic circulation from the left ventricle, the brain, kidneys, spleen, or extremities may suffer and the symptoms may be obvious. One embolus suggests the serious probability of others to follow.

There are other complications which time allows only mention by name: cardiac rupture of a ventricular wall or the septum and cardiac aneurysm.

The complications which have been thus far listed have been documented by many observers, and now I should like to direct your attention to fields less well known, in which associated pathologic changes in viscera other than the cardiovascular system complicate the clinical picture. Theoretical-

ly, coronary occlusion may occur in association with any acute or chronic disease, and if the experience of any one observer were great enough he would encounter all of the examples. All observers of coronary sclerosis and thrombosis have been impressed with the frequency of gastro-intestinal symptoms in the patient with angina before occlusion, and also during and after the acute attack. Such symptoms are usually considered a part of the disease.

We have found that gallstones, duodenal diverticula, ulcer of the stomach, diverticula of the colon, diaphragmatic hernia, polyps, hemorrhoids, and even cancer appear in our records. In earlier years we followed the conventional thought that abdominal distress, belching, fullness, and other gastro-intestinal symptoms were a part of the syndrome of coronary insufficiency. Individual patients, however, have taught us that when these symptoms were present, they deserved investigation in routine diagnostic studies as soon as circumstances permitted; i.e., a careful record of symptoms, studied palpation of the abdomen, test meal, stool analysis and x-ray examinations of the abdominal viscera. Such investigations have usually yielded a valid gastro-intestinal diagnosis, and adequate management yielded relief of symptoms and improvement of the cardiac status. Some combinations encountered in this study have been simple clinical entities and others have proved to be rather intricate problems, but all were of practical significance.

Simple constipation in the first few days of an acute coronary thrombosis may be a minor event. If it leads to obstipation and formation of a hard scybala in the rectum, the distress of removal may be a critical point in the course of a seriously sick patient. If this is followed by a few distressing days of painful thrombotic hemorrhoids, new difficulties are added. Such simple complications may be readily avoided.

A more complicated gastro-intestinal problem is the association of gallbladder disease and coronary thrombosis. In the gallbladder group there have been a few patients who have had the misfortune to have an acute coronary occlusion and a gallstone colic occur at the same time. In this re-

gard I recall observing, some years ago, a discussion between an internist and a surgeon regarding a man with upper abdominal and lower chest pain. The surgeon insisted the patient had a gallstone colic and the internist insisted he had an acute coronary occlusion. The surgeon operated on the patient and proved his diagnosis by the pathologic specimen which he removed. The patient continued to have pain and the clinical course was characteristic of coronary occlusion. Serial electrocardiograms showed the usual changes noted in this condition. Prior to the operation neither physician admitted the possibility of the two disease entities occurring simultaneously. The further course of this patient was uneventful until a second coronary thrombosis occurred some years later.

Patients with coronary disease and gallbladder disease present a clinical picture of the admixture of the syndromes of each: the anginal pain occurs as a result of effort or emotion and may have the usual distribution across the sternum, to the left arm or both arms, or may radiate only to the abdomen. The gallbladder dyspepsia is the usual well known group of symptoms so commonly found, except they appear to aggravate the frequency of the anginal pain particularly with relation to food intake. This is especially true with regard to abdominal distention and precipitation of anginal pain. Patients who have had a cholecystectomy usually show definite improvement in the anginal syndrome.

The question sometimes arises as to the advisability of a cholecystectomy after coronary occlusion has occurred. On first inspection of this problem one might say that such a patient is a decidedly poor surgical risk, and this is undoubtedly true within the first few months of postocclusion. After rehabilitation, however, such patients tolerate surgical interference and can safely be operated upon. Our experience is not yet sufficient to state whether surgical treatment is always advisable. There are some observers who feel that the gallstone formation is a part of a disturbed cholesterol metabolism and that the coronary disease is simply another manifestation of the same biochemical process. There are many phases

of this combination of diseases which will bear detailed study.

In the group in whom ulcer of the stomach complicated the coronary disease the clinical picture was equally varied. The ulcer syndrome may precede the coronary entity and may mask the anginal picture. More commonly it has been our impression that the ulcer appeared to aggravate the anginal syndrome. A concrete example was that of a patient with a long standing record of gastric ulcer which had been treated surgically, who developed a recurrent ulcer in the gastrojejunostomy union. Dietary restriction and alkinization brought the ulcer distress under partial control and there was material improvement in the coronary aspect of the problem. There are recent reports on the co-existence of these two diseases which suggest that they are of common vascular causes. The implication is made that the ulcer represents a thrombosis of an arterial branch of the blood supply of the stomach, and that the thrombosis in the blood supply of the heart and the stomach occur at or about the same time.

Serious hemorrhage from a gastric ulcer usually aggravates the anginal syndrome and may distort the electrocardiogram, causing confusion as to diagnosis. An example is that of an elderly patient with a coronary thrombosis in 1939, with an uneventful recovery and rehabilitation. He was known to have a healed duodenal ulcer and a duodenal diverticulum. In 1943 he suffered a severe hemorrhage from the ulcer. During this period he developed symptoms of cardiac distress and his electrocardiographic findings reverted to those which were present during the acute stage of his occlusion. As he improved, with regain of his blood loss, the electrocardiographic findings quickly returned to those noted before the hemorrhage. This patient could have readily passed for an acute coronary thrombosis with the exception of the knowledge of his previous record.

There are many variations of the gastrointestinal problems complicating coronary diseases, and time does not permit adequate discussion of the details of their analysis.

Repeated individual experiences of such

complicating problems have led us to study patients with status anginosus from a new viewpoint. Those uncommon patients whose angina is so frequent and so severe that their situations are practically uncontrollable, have an almost continuous state of anginal pain. In our experience the majority of such patients fall within the compass of our subject. They are patients who have a complicating problem, noncardiac in nature, which so aggravates the heart disease that the angina seems uncontrollable. The solution of such problems does not lie in the surgical field, but demands exhaustive diagnostic study. An adequate answer is usually obtainable in a secondary diagnosis and proper management offers relief from total invalidism, and often from morphinism. In some cases psychiatric entity is the hidden complication.

Well defined psychoses are rather unusual complications, except those encountered when coronary occlusion occurs in patients confined to an institution. In routine practice, more benign situations are the rule. The shock of myocardial infarction disturbs the mental equilibrium of even the most stable mentality. In the older groups, particularly 70 or above, mental confusion is frequent, with hallucinations, insomnia, depression or irritability. Such symptoms interfere seriously with the administration of oxygen, as well as nutrition and fluids, and nursing care. In such patients dehydration and a short period of malnutrition accentuate the complication and the patient may rapidly decline and be lost. Another problem is the common fear neuroses and phobias developed during convalescence. A patient who is placed in bed for six weeks and taught to spare himself physical and mental activity with daily conversation about his heart from the hospital staff of physicians and nurses, as well as those of his family, might well be expected to have some unusual concern about his situation during the convalescent stage. At times this apprehension becomes a serious neurosis and the patient exaggerates his invalidism beyond the actuality of the situation. Patients quickly sense any insecurity of the physician's estimate of their problem and if the doctor is fearsome of their

welfare, they naturally tend towards the same attitude. In this group a warning should be noted regarding the use of bromides and phenobarbital. Both drugs are of great value and only seldom does the patient receive an overdose for too long a time. Intoxication, however, is possible and easily overlooked.

We have had the opportunity of observing a limited number of patients with coronary occlusion complicated by acute and chronic alcoholism. Alcohol diminishes pain perception and the shock of occlusion may easily be confused with alcoholic depression. On "the morning after" one naturally expects nausea, vomiting, upper abdominal distress, and depression which may mask the clinical picture of coronary occlusion. The objective findings such as persistent fall in blood pressure, tachycardia, or unusual bradycardia, weak heart tones, and the electrocardiographic findings are important points in establishing the correct diagnosis. In the postcoronary period we would like to point out the frequency of paroxysmal ventricular tachycardia, or auricular fibrillation following the abuse of alcohol. The confirmed alcoholic is rather apt to precipitate cardiac insufficiency by overactivity and is always a problem patient. This does not imply that the therapeutic use of whiskey or brandy should be denied the temperate patient with angina or in the period following coronary occlusion.

Drug therapy is not the most important phase of the treatment of coronary occlusion at the present writing. Xanthine derivatives, however, are widely employed, orally by most physicians but intramuscularly and intravenously by a few. Intramuscularly the injections are usually very painful, and intravenously one sometimes may encounter minor or severe reactions. Rarely a skin rash may occur to complicate the picture. Fortunately, only a few patients are sensitive to these drugs, and the same holds true for the use of the other drugs commonly used, particularly the various opiates.

Another group of complications disturbing in the course of acute coronary thrombosis are those concerned with the urinary tract. In older men prostatism is an ex-

pected problem. When the patient becomes bedridden with the acute shock of infarction, he often finds that he is unable to void and the obstructive situation is evident. A temporary indwelling catheter is usually the method of choice in handling such patients rather than repeated catheterization. The catheter may usually be removed after the acute phase of the coronary situation is over. Patients with marked obstruction present a most serious problem in the months following acute occlusion. The risk of surgical intervention is esteemed to be great, and a conservative policy often leads to further complications. It has been our impression that such a patient may be a better risk than one expects. In all probability the urologists have operated on, and are operating more or less safely on, many older men who have had a coronary thrombosis which was never recognized. Other defects of the urinary tract are exceedingly common, such as cystitis, urethral stricture, bladder or renal stones, pyelitis, diverticulum of the bladder, and others too numerous to mention.

From a metabolic viewpoint, the most common disease is that of diabetes mellitus and its relationship to vascular changes has been well documented. Many authors have pointed out that insulin often serves to prolong a diabetic's life until he succumbs to a vascular complication, frequently cerebral, coronary, or a peripheral arterial thrombosis. It is also well established that vascular crises of this type may show a transient glycosuria with the onset of the acute thrombosis which may lead to a false impression as to the presence of diabetes.

The patient with uncontrolled diabetes, coronary sclerosis, and angina usually has a high degree of invalidism. Adequate control of the diabetes, however, often will show a remarkable improvement with regard to the angina. His exercise tolerance will be much increased and the frequency and degree of the painful attacks greatly reduced. Occlusion of the coronary circuit is probably postponed with continuation of adequate diabetic control.

Another metabolic disorder which may well be related to coronary sclerosis and thrombosis is that of gout. A very rare

metabolic combination was observed in one patient who had hyperparathyroidism, renal stones, bone decalcification, coronary sclerosis and occlusion, who died in a Stokes-Adams convulsion. Paget's disease, with bone decalcification, is another rare metabolic combination with coronary occlusion.

Hyperthyroidism in the patient with coronary sclerosis seems to aggravate the frequency and degree of the anginal distress, and presents a formidable problem as a complication of occlusion. It presents the usual tendency to provoke paroxysmal or chronic auricular fibrillation and cardiac insufficiency. Surgical interferences must be delayed for some months but is not necessarily contraindicated at a later date.

Hypothyroidism has been found to be a factor in the cholesterol metabolism by a number of observers, and has been indicated by some to be a causative agent in the sclerotic invasion of the coronary circuit. The associated anemia and low blood pressure seem to contribute to the anginal distress. Thyroid medication is administered with difficulty and often provokes anginal distress or transient auricular fibrillation before the symptoms are controlled or the basal metabolic rate is brought to a normal level.

Arthritis, and bursitis as well, may also be included among the metabolic complications. It is unfortunate that these conditions frequently occur about the left shoulder joint so that the pain is often confused with angina, although the syndromes have nothing in common except the anatomic area involved. After occlusion, arthritic distress in the joints of the arms, legs or back is quite a common complaint, usually evident shortly after the patient begins to convalesce after a long period of bed rest.

The complications of the respiratory system vary from minor infections of the nose and throat to those of pneumonia. In the latter group the sulfonamide drugs may be employed as usual, except for careful observation as to blood levels, and avoidance of overdosage. Pulmonary emboli have already been mentioned as a complication. Another disease which is a great aggravant to a patient with coronary throm-

bosis is bronchial asthma. The oxygen tent may exclude most of the air-borne material to which the patient is sensitive and prove a great help. Every effort should be made to seek the source of all the allergic irritants and remove them. A common question is whether adrenalin is to be discarded or retained by the patient in his nasal spray, hypodermically or orally as ephedrine. The effect of adrenalin upon the coronary circuit is a controversial one and varies greatly in the animal species according to the pharmacologists. We have avoided the use of adrenalin hypodermically in such cases but have observed no demonstrable ill effects upon the patients employing it in their nasal sprays. In postcoronary occlusion we have used adrenalin experimentally in studying those patients with bundle-branch block, with no ill effects.

A complication which has come to our attention recently is that of undulant fever. In three such patients the onset of the infection apparently antedated the coronary occlusion by some months. The question arose as to whether there was any direct relationship between the two diseases, i.e., did the infection produce a coronary arteritis and thereby the occlusion? It seems much more likely, however, that the occurrence of the two entities was purely coincidental.

Hematologic problems are comparatively uncommon combinations with coronary thrombosis. It has long been known that the patient with pernicious anemia and coronary sclerosis develops severe angina during the period of low blood levels. The angina improves or even disappears when the normal blood levels are attained. The same holds true for acute blood loss, from the gastro-intestinal tract or any other source. On this basis it is sound practice to study all coronary patients regarding their blood state and to correct even minor defects in the blood.

As we have had the opportunity to observe patients with coronary thrombosis over the past two decades, we have been much impressed with the number and the wide variety of complications. In studying patients with fellow physicians it has been

apparent that their problems were often those of a masked complication which distorted the primary clinical picture. The intermingling of the symptoms of two disease entities is a field of never-ending interest and presents a challenge to one's training and experience. Prolonged disability should always arouse the thought of a hidden complication. The patient with uncomplicated coronary thrombosis should present a rather clear record of previous angina pectoris provoked by effort. With the onset of occlusion the attack is usually characterized by typical protracted pain and collapse with only a few days of acute symptoms. His convalescence during the standard six weeks' rest in bed should be uneventful, and his period of rehabilitation equally tranquil. His return to routine activity should be unmarred by symptoms, and his disability comparatively limited. When such is not the rule it has become axiomatic in our practice to seek an explanation in a complication either related to the occlusion, but more often in some organ or disease of a noncardiac nature.

NO SENSITIVITY TO RATION TOKENS

"On February 27 the Office of Price Administration issued its new ration tokens, made of vulcanized fiber," *The Journal of the American Medical Association* for February 26 says. "Some publicity just released cleared and issued through facilities of the Office of War Information informs us that these tokens are 'harmless to the handler.' The U. S. Public Health Service has been making patch tests, including investigations of the raw materials of which the tokens are made and of the finished tokens, for more than five months; 'the tokens failed to irritate or sensitize the skin of any of those on whom they were tried.' Perhaps people are less sensitive to war measures than they were at the beginning. Furthermore, the manufacturers of the token materials have advised the OPA that 'there has been no case in which an employee suffered an unfavorable reaction.' Any member of a ration board can, however, describe reactions that were, to say the least, unfavorable. It seems that the new ration tokens are made of vulcanized fiber, which is the material used for sales tax tokens in many states, for tabbing hotel keys and for dog licenses. These preliminary uses have no doubt accustomed many people to the feel of vulcanized fiber. Just how sensitive the public is going to be to the new ration tokens from a psychologic point of view, time will tell."

THE MALIGNANT LYMPHOMA

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Until some definite etiologic factor for the diseases of the lymph nodes is determined or proven, the classification of the diseases of these bodies will remain about as confusing as they have been and still are. But the discouraging feature about the whole matter is the new but unnecessary names given to the diseases or the condition of the lymph nodes.

The differentiation of the various conditions of the lymph nodes is a difficult matter even from the standpoint of pathologic histology. This is probably due to the fact that the different stimuli act upon a common factor, of which we will have more to say a little later.

If we begin with that condition ordinarily termed "Hodgkin's disease" differentiation must be made from tuberculous, syphilitic, nonspecific enlargement of the lymph nodes, leukemias of various types, Banti's disease, familial hemolytic jaundice, malaria, Gaucher's disease; other forms of lipoid histiocytosis, possibly typhoid fever and pyemia, lymphosarcoma and in some instances of metastatic tumors of various kinds. Clinically, Hodgkin's disease of the cervical region might be confused with tumor of the carotid body and branchial cyst and hygroma of the neck.

A detailed history of the development of ordinary Hodgkin's will in most instances eliminate many of the conditions enumerated above. This does not take in consideration the Hodgkin's of acute onset nor the Hodgkin's sarcoma, which condition is to many pathologists nonexistent but there is a big argument against them.

The *differential diagnosis*. In tuberculous lymph nodes the prodromal manifestations, such as pruritus and diarrhea, are not present. Patients in whom there are enlarged lymph nodes but in whom there are tuberculous lesions in other parts of the body are not likely to be suffering with Hodgkin's, except in those very rare instances in which

case the patient is suffering with both diseases.

There is greater tendency to matting of the nodes in tuberculous and adhesions to the skin and discharging sinuses may develop. As a rule, the tuberculous lymph nodes do not become so large nor is the process as a rule so general as in Hodgkin's. There is a variation in the size of the lymph nodes from time to time in both diseases but probably more common in Hodgkin's. This is the lymph edema.

In syphilis the lymph nodes are usually small, shotty and not so numerous, and even in the tertiary stage they are usually not so large, may occur in one or more chains but are not so generalized as in Hodgkin's.

Notwithstanding the conclusion of some investigators who maintain that an increase in the eosinophiles of the blood have no diagnostic significance in the diagnosis, we think when considered with all the other manifestations it is sometimes helpful.

Whether an increase in the lymphocytes of the blood in tuberculosis is helpful in differentiating between Hodgkin's and tuberculosis is questionable.

Focal mouth infections often give rise to nonspecific enlargement of the cervical lymph nodes which later become matted, adherent to the skin and later develop into a discharging sinus. Sometimes the blood shows an increase in the polynuclears.

The differentiation of leukemia and Hodgkin's is not always so easy, so that often a little aid on the side is quite essential. While the Hodgkin's may begin with an enlargement of a single group, the leukemias do not invariably show a generalized enlargement at first but in a few instances may remain during their whole source a local process. While the blood count in many instances is a life saver, we have to contend with the aleukemic phase although even in the aleukemia the blood usually will show abnormal white cell forms and a lymphocytosis.

The differentiation of Hodgkin's and the myeloid form of a leukemia is usually not a difficult matter, although the splenic type of Hodgkin's may be a matter of investigation, yet the splenic tumor in Hodg-

kin's is very rarely so large as in myeloid leukemia. Then, too, the prodromal symptoms of Hodgkin's are not so common in myeloid leukemia yet the skin changes may be found in myeloid leukemia. In most cases, the blood count settles the matter very satisfactorily but one must not forget the blood counts in myeloid leukemia are sometimes atypical.

The acute leukemias and the rapidly developing Hodgkin's may bear a resemblance, although the blood picture is usually a deciding factor even though in the acute leukemias the actual count may not be high or even near the normal, the abnormal forms of cells lead to a differential diagnosis. The abnormal lesions of the mucous membranes in the acute leukemias aid in the diagnosis. The latent period with a recurrent fever, skin eruptions, then the onset of the acute phase of the Hodgkin's distinguishes it from the acute leukemias.

That form of Hodgkin's in which there are periosteal nodes might be confused with either a general metastasis of some primary carcinoma or multiple myeloma. If the primary tumor cannot be identified as such or the x-ray pictures of other bones do not clear the matter, the differential diagnosis may rest upon the histologic picture.

That condition referred to as lymphosarcoma may give rise to difficulties in differentiating from Hodgkin's, especially of the Hodgkin's sarcoma. The histologic picture usually settles this question although at times with great difficulty. Fever might be present in both conditions, although the skin manifestations are not so common in lymphosarcoma. Then the question of the matting of the adjacent nodes in lymphosarcoma, although this is not a 100 per cent point of differentiation. The spleen is not invariably enlarged in Hodgkin's.

In those cases of Hodgkin's with a splenic tumor, one must differentiate leukemia, syphilis, tuberculosis, Banti's disease, familial hemolytic jaundices, malaria, Gaucher's disease, typhoid fever, pyemia and the anemia of pseudoleukemia.

In Banti's disease the spleen is usually hard, and a late development in the disease; the associated enlarged liver and ascites are helpful. In malaria the finding of the

parasites in the blood are helpful. In familial hemolytic icterus the occurrence of the disease in other members of the family and the fragility of the red blood cells are manifestations which serve a useful purpose. There ought to be little confusion between typhoid and pyemia and Hodgkin's disease. In Gaucher's the bronzing of the skin, the history of a long period of illness—a question of years, the possibility of finding the lipoid-laden cells from the spleen. The picture of a secondary anemia is pseudoleukemia.

Kolouch, in discussing the histologic changes in tissue subjected to induced inflammatory processes (artificially) finds after 14 hours indications of lymphocyte transformations. The pàchychromatic lymphocytic nucleus becomes more diffuse so that the nucleus is like that of the hematogenous macrophage. The cytoplasm increases in amount and becomes less basophilic. They take on phagocytic characters. By the 18th hour the histogenous macrophages are outnumbered by the hematogenous macrophages.

By the 26th hour fibroblasts show mitosis; the histogenous macrophages have digested their acidophilic inclusions. The hematogenous macrophages have a chromatin pattern like that of the histogenous macrophage but unlike the lymphocyte. The cytoplasm is increasing and inclusions of albumin and pseudoeosinophile are seen.

By the 49th hour fibroblasts showing mitosis are the most conspicuous cell, but they show no tendency to form macrophages. The hematogenous macrophage is still smaller than the histogenous macrophage, but by the 76th hour they approximate each other in size and morphologic aspects.

According to Maximow, the edothelial cells will proliferate to form buds and loops and eventually capillaries.

The fixed macrophages are endowed with manifold tendencies. In the omentum, under physiologic conditions, many of the fixed macrophages are transformed into wandering phagocytes. In inflammatory conditions the macrophages and lymphocytes become polyblasts.

Lymphocytes migrate from the blood vessels into the tissue, undergo rapid hyper-

trophy and are transformed into macrophages. In two days after the onset of the inflammation these phagocytic cells can be distinguished from the histogenic phagocytes by the fact that they are smaller but in another two days such differentiation is no longer possible.

In different inflammations the polyblasts assume different characters, as in tuberculosis the epithelioid cell and by fusion the giant cell, or in other forms of inflammation the foreign body giant cell.

Lymphocytes and monocytes which are taken from the circulating blood and lymph, will in suitable media develop into macrophages which will phagocytize dyes in the culture media. In other cultures the transformation proceeds further so that by means of mitotic division the macrophage develops into fibroblast, which is a different cell producing collagen.

All agree that the various myeloid elements of the bone marrow develop through proliferation and differentiation from the basophile free stem cell — the hemocytoblast.

In extramedullary hemopoiesis, under certain circumstances the lymphocyte of the circulating blood may proliferate and become transformed into myeloid cells.

In cultivating fragments of lymph nodes of the adult rabbit in media containing bone marrow lymphocytes differentiate into myelocytes.

In cultures both myeloblasts and lymphoblasts pass through a monocyte stage before becoming macrophages.

In the omentum the formation of fixed macrophages from perivascular undifferentiated cells has been described.

In extramedullary hemopoiesis, the myelocytes can be traced directly to the perivascular fixed cells.

If foreign protein be introduced into the body the macrophages system, which has to dispose of the foreign substance, shows an increase in size and number all over the body. The source of the macrophages also lies in the undifferentiated mesenchymal elements — the primitive reticular cell.

The study of the histogenesis of the lymphatic tissue shows that the lymphocytes arise, not from the macrophages but from

the mother lymphocyte which may be at times traced to the primitive reticular cell — the same source as the macrophage.

Local lymphocytes also arise from undifferentiated perivascular cells and not from the macrophages.

The macrophage plays an important part in the defense mechanism. They can be transformed into phagocytic polyblasts, into giant cells and into fibroblasts.

In inflammation and in cultures fibroblasts develop from macrophages and primitive reticular cells. They have either no or very slight phagocytic properties, and do not store any appreciable amount of vital dyes.

There are many transitions from these primitive reticular cells to larger cells which are actively phagocytic.

The fixed macrophage are stellate or spindle shaped, have a large pale nucleus and adhere to the reticular fibers.

The fixed macrophage may become the free macrophage with thin membrane like pseudopods. These cells are energetically phagocytic, taking with them any foreign particles with which they come in contact. They may contain debris of dead cells, engulfed erythrocytes in various stages of disintegration, and in supravitality stained animals numerous large dye granules. In fresh preparations stained supravitality with neutral red, the inclusion bodies and vacuoles of the free macrophages stain deeply.

Thus we see that media and environment may influence the type of the cell differentiation, but probably the most important factor in the differentiation is the character of the stimulus, its degree of activity and the degree of resistance or opposition it meets on the part of the body resistance.

The study of cell cultures and cell characters in inflammation show that one cell type may differentiate into a second and even a third or fourth type, so that our classifications have probably been based too much upon a definite stage of the cell differentiation and we have neglected the study of the evolution of the cell or its differentiation.

If we study the development of the inflammatory condition following the irritation of the tubercle bacillus, at first we find

the small cell with a narrow rim of cytoplasm, a comparatively large and pachychromatic nucleus and a number of polynuclears, all of which are largely replaced by a large cell with an abundant amphophilic cytoplasm and an oval vesicular nucleus. Later a very large cell with many nuclei — the giant cell — and if the body resistance is sufficiently great the presence ultimately of fibroblast, the cell that produces the collagen and a consequent grous tissue wall.

In the ordinary Hodgkin's we first find the small cell with the scanty cytoplasm and the pachychromatic nucleus, then the larger reticulum cell, as we call it, which is like the free macrophage, then the larger cells with multiple nuclei, and the large cells with the intense acidophilic cytoplasm and the fibroblast, with the production of reticulum and collagen which is the sclerosing effect late in the disease. While we sometimes see necrosis in the ordinary Hodgkin's it is never exactly like the caseous necrosis in the tubercle.

I think we can pretty well conclude that the degree of sclerosis in ordinary Hodgkin's is directly in proportion to the degree of resistance on the part of the body just as it occurs in tuberculosis. The only difference between the two conditions is that in tuberculosis, as we see the state of affairs today, the resistance to conquer the disease is greater than in Hodgkin's; in other words, the recovery rate in ordinary Hodgkin's is very low, much lower than in tuberculosis.

In Hodgkin's sarcoma the cell type remains the same but the degree of differentiation is less and the habit of growth becomes extraordinarily prominent, hence the process is exactly like a neoplasm. The degree of the stimulus, or exciting factor, is extraordinarily out of proportion to the degree of resistance.

In lymphatic leukemia, in both acute and chronic forms there is probably the same type of exciting body. The exciting body in the acute forms acts more energetically, resulting in greater activity of the cells of the lymph node. According to Maximow, the ordinary lymphocyte is a product of a lar-

ger cell which larger lymphocytes at times develop from the reticular cell, although under ordinary condition the larger mother lymphocyte by mitosis develops the ordinary lymphocyte. In the acute forms of lymphatic leukemia many of the larger mother lymphocytes do not complete their differentiation, hence we find many large lymphocytes in the lymph node or even in the peripheral blood stream. Whether the body resistance to the exciting body has any determining influence in differentiation from large lymphocyte to the mature form I do not know.

What it is that determines whether either form of lymphocyte breaks the barrier of the lymph node and gets into the peripheral circulation is not known. The histologic picture of the lymph node is no criterion as to whether there is a leukemic process. Why there is in the same person at one time a leukemia and a little later no leukocytosis in the peripheral blood stream, is also not known.

The histologic performance in all the leukemias is like that of a neoplasm, while the histologic performance in ordinary Hodgkin's possesses many characters like that of an inflammation which cannot be said of the Hodgkin's sarcoma.

In giant follicular lymphoma the exciting body is probably different from that which excites Hodgkin's or any of the forms of leukemia, judging from the histologic picture produced.

USE OF BASAL TEMPERATURE GRAPHS TO DETERMINE DATE OF OVULATION

A record of body temperatures, taken rectally daily before rising under standard conditions, is an inexpensive and simple method which very often will indicate the date of ovulation and thus the time when conception is most likely to occur, Pendleton Tompkins, M.D., Philadelphia, declares in *The Journal of the American Medical Association* for March 11. He describes charts and accompanying instructions which can be given women so they can keep an accurate record of daily temperatures.

Dr. Tompkins' method is based on the findings of many investigators that a woman's temperature under normal conditions is lower during the first part of the menstrual month and that the transition from a low level to a higher one occurs about the time of ovulation.

FUSED KIDNEYS

With Special Reference to Horseshoe Kidneys

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When one speaks of fused kidneys reference is made to kidneys that are united. Such organs may be normal with reference to function and symptoms of discomfort or unnatural feeling to the patient. One is dealing with an abnormality as to size, shape and location. Then, too, one may find an abnormal function, calculi, hydronephrosis, pyelitis, tumors, and in fact all types of pathologic changes which are prevalent in other kidneys.

Prior to the x-ray horseshoe kidney was rarely diagnosed. There is record of a very few cases which were discovered by physicians who were able to palpate the isthmus connecting the two kidneys. Since the advent of roentgenology and cystoscopy the diagnosis of horseshoe kidney is a common occurrence. With the x-ray alone the diagnosis is difficult but the pyelogram makes the decision on a case easier and more certain. Statistics show that horseshoe kidneys occur about one to a thousand and some even claim the figures as low as one to five hundred.

A horseshoe kidney is a congenital condition. During the course of the embryologic development there is a fusion of the renal fundamentals. The union of the kidneys may be at the lower or upper end. The former type is more prevalent. This union is accomplished by a band passing across the aorta and vena cava. This band may be fibrous tissue or it may be composed of renal tissue. The connecting mass at times takes on the form of a third kidney, to each pole is welded an abnormally placed kidney. One kidney may be smaller than the other.

The blood vessels of a horseshoe kidney may be normal in number but abnormally distributed. There are cases which have an increase in the number of arteries. The

isthmus may receive a special artery. The principal arteries for each kidney arise from the aorta above the level of the renal pelvis and pass downward in front of the pelvis. A small artery arises at each side from the aorta or iliac artery below the kidney and ascends to the lower pole of each kidney.

In a horseshoe kidney there are a number of variations in the pelvis and ureter. Each kidney has a single pelvis and ureter ordinarily, although one may find an increase in the number of pelvises and irregularity in form. The isthmus may have a special ureter which opens into the bladder at some abnormal position. The abnormally placed ureters result in stasis of the urine which in turn causes some hydronephrosis, pyonephrosis or calculi. It is these types which cause the patient an unusual amount of suffering.

In considering the symptoms of a horseshoe kidney one must not lose sight of the fact that one may be dealing with an infected kidney, a hydronephrotic kidney or a kidney full of stones, or possibly a tuberculous kidney. The symptoms that accompany a normally placed kidney with these affections will be observed in a horseshoe kidney similarly affected. In other words, one may have pain over the lower abdomen, pus or blood in the urine, elevation of temperature, nausea and vomiting, positive tuberculous urine, pain in the epigastrium and gastro-intestinal disturbances. The symptoms of a horseshoe kidney, when present, may simulate other abdominal disorders. Appendices have been removed when the patients' symptoms were traced to the kidney subsequent to the operation. If a case is not thoroughly worked up, some uterine or tubular involvement will be mistaken for a kidney disorder.

In making a diagnosis of horseshoe kidney, like all other diseases, a complete history is of paramount importance. If a patient has had pulmonary tuberculosis there may be some tuberculous angle to the kidney involvement. A complete urinalysis will aid in determining if one is dealing with pyelitis or possibly stones in the kidney. A cystoscopic examination with catheterization of the ureters and specimens from

both sides, will aid in telling if one or both pelves are involved. Single x-ray films with pyelograms of both sides, both in reclining and upright positions, should be made. Any kidney pelvis that permits urinary stasis is potentially diseased. In analyzing a kidney pelvis for drainage interference one has to consider a number of things: the shape and size of the kidney should be observed; the degree of ptosis and rotation; determination if the opening of the hilum is high, low, middle, anterior or posterior; depth of the pelvis; the number, size and distribution of the minor calices and their relation to the major calices as to capacity; and size of entrance of pelvis into the ureters. A kidney pelvis is not normal even though it has a typical shape if it is so related to the parenchyma as to interfere with the free flow of urine in the pelvis or even in one calyx.

The normal ureter has three narrow areas: (1) at the ureteropelvic juncture; (2) at the bifurcation of the iliac vessels; and (3) vesicoureteral juncture. One should not attempt to make a diagnosis with incompletely filled ureters or an overdistended one. This same thing applies to the pelvis. In making an accurate and true diagnosis one should have the pelvis and ureters well filled with the opaque dye. Very often the roentgenologist and the urologist will make an inaccurate diagnosis from a poorly made x-ray film rather than go to the trouble of making an extra picture.

A catheter coiled in the pelvis will often give a misleading pyelogram. A catheter too high in one of the calices will result in an odd pyelogram.

Although urography has helped considerably in finding and diagnosing kidney involvements, still some of the best urologists fail to recognize horseshoe kidneys prior to their operation. In a New York hospital's series of 25 cases (up to 1932) every one of the patients had been examined at other clinics or by supposedly competent physicians. Twelve of them had been operated upon for the relief of symptoms apparently due to the anomalous renal arrangement, the diagnosis being chronic appendicitis, cholecystitis, cholelithiasis, and other intra-abdominal conditions not connected with the kidney.

In diagnosing a horseshoe kidney one may oftentimes palpate the isthmus or a mass across the median abdomen or on one side of the vertebral column. At times the pressure that this isthmus bears on the aorta abdominalis will cause an accentuated pulsation of this large vessel, which is a helpful sign in diagnosing a case.

For convenience, the treatment of fused kidneys may be divided into medical and surgical. The type of treatment to which one resorts depends on the kidney condition found. If one is dealing with a pyelitis, it may be possible to clear this infection by cystoscopic examination with dilatation of the ureters, thereby establishing good drainage from the kidneys to the bladder. Urinary antiseptics, including some of the sulfa drugs, may benefit the patient. A kink in the ureter may be corrected by dilating the ureters with large catheters and leaving the catheters in place for several days. A calculus in the ureter may be removed through the cystoscope by dilating the ureters or with a stone dislodger.

A horseshoe kidney may not be affected by any definite pathologic condition but still may produce symptoms of paroxysmal pains and other disturbing symptoms such as nausea and vomiting. These types of fused kidneys necessitates some surgical intervention. Often the urologist may relieve the symptoms by freeing the ureters and vessels attached. A heminephrectomy is often necessary in order to make a patient comfortable. In my opinion, this operation is best performed through a lumbar oblique incision extraperitoneally.

Report of Cases

Case 1—C. H. D., male, aged 43, gave a history of having passed several stones and complained of pain over left loin radiating to the left testicle; also complained of slight nausea.

Abdominal examination revealed tenderness over left loin radiating to the left testicle; and tenderness over left lumbar and left upper abdominal regions. Voided urine showed a few red and white blood cells.

On cystoscopy the bladder was negative. A No. 6F catheter met no obstruction on the right side. There was a slight obstruction on the left but I was able to pass a catheter to the pelvis of the kidney. Specimen obtained from the left showed few pus and blood cells; the right was negative. A pyelogram showed a fused kidney left with a ureteral stone. After leaving the

catheter in place for 24 hours the patient passed a small oval stone.

Case 2—E. C., male, aged 38, who gave his occupation as a farmer. His family history was unimportant.

Physical examination was essentially negative except for tenderness over the right upper quadrant of the abdomen at the right costovertebral angle. Microscopic examination of the urine showed numerous pus cells.

Retrograde pyelogram showed fused kidneys, right, with anastomosing ureters at the junction of the lower and middle third. Specimen of urine from the right showed numerous pus cells; specimen from the left was negative.

Case 3—Male, aged 45, whose childhood history was negative, stated that after he became grown he began to have intermittent pains over the region of both kidneys and his back. These pains gradually grew worse until it was necessary to consult a physician.

Retrograde pyelogram showed a bilateral fusion of the kidneys with two separate and distinct ureters on each side. Examination revealed a bilateral pyelitis. The ureters were dilated and he was given sulfathiazole and soda. The intervals of attacks of pain grew longer and the pus in the kidneys cleared. He has remained clear of symptoms for about two years.

Case 4—Male, aged 47, whose family history was negative, had a blood pressure of 190/130, as well as a positive blood Wassermann reaction. Blood chemistry was normal; numerous pus cells were found in specimens of urine from both kidneys.

Retrograde pyelogram showed fused kidneys, right, with bifurcated ureters.

Patient was given antilutetic treatment over a period of a year. The ureters were dilated about every two months and urinary antiseptics were administered with good results.

Case 5—Male, aged 45, gave his family history as being unimportant. His chief complaint was severe pain over left loin and back and he had suffered with such pains at intervals until he had become a narcotic addict.

Pyelogram showed a horseshoe kidney with concavity upward. Specimens of urine from both sides showed a few pus cells.

Dilating this patient's ureters and leaving catheters in place for 12 or 24 hours would seem to give relief for a few weeks, and sometimes for two months.

Patient died of pneumonia before any surgical procedure of the kidney was performed. Autopsy divulged a horseshoe kidney as I had determined from a previous study of the case.

Case 6—Male, aged 23, was discharged from the Army with a horseshoe kidney which showed a stone in the pelvis on left. Urine contained numerous pus and blood cells. Patient complained of severe pains over the left loin radiating to the left testicle.

Pyelogram showed a horseshoe kidney with connection at lower poles and the concavity upward. In the pelvis, on the left, was an oval calculus about the size of a hickory nut. The function on the left was somewhat impaired. The right kidney was normal. Specimen of

urine from the left showed numerous pus and blood cells, while the right was negative.

The patient is at present in the hospital. It is my intention to remove the stone and possibly perform a left heminephrectomy as soon as the blood chemistry, which at present is slightly high, is within operative limits.

Conclusions

1. The most prevalent of the fused kidneys found is the horseshoe type.

2. In dealing with horseshoe kidneys one may find practically all types of the infections that are discovered in the kidney of normal size, shape and position.

3. One should make every effort to make an accurate and complete diagnosis. The use of the x-ray and cystoscope are of paramount importance in making diagnoses of horseshoe kidney.

4. The symptoms may be relieved by medical treatment. Some patients cannot be cured without the use of surgical procedure.

DISCUSSION ON PAPERS OF DOCTORS FUNKE AND KIRKLAND

Dr. Rudolph Bell (Thomasville): One very perplexing problem confronting the doctor in the management of cases of individuals who have horseshoe kidneys is, what advice to give individuals who are pregnant or wish to become pregnant. One fails to find a satisfactory answer to the question on the perusal of literature. No one urologist is likely to see enough cases of horseshoe kidneys in pregnancy to render an authoritative opinion on their management. Any authority or opinion will necessarily have to be derived from the deductions made by the collection of cases reported by various individuals.

In an effort to clarify the situation I wish to report in brief two cases, each of whom was sent to me for urologic examination. The first was three months' pregnant and had a marked pyuria. The isthmus of the kidneys was at the lower poles. There was a second degree hydronephrosis on the left side. By catheter drainage, pelvic lavages and urinary antiseptics the pus was greatly diminished in amount but was never entirely eradicated. At six months it was necessary to have labor induced. I subsequently divided the isthmus of the kidneys and anchored the hydronephrotic kidney in a normal position.

The second case was one who was sent for urologic examination, on whom I found horseshoe kidneys. This individual had had two normal pregnancies and deliveries before the diagnosis of horseshoe kidneys was made.

From the two cases here reported one may be in-

clined to lean toward the conservative side in the management of horseshoe kidneys in pregnancy.

I enjoyed the first paper very much. Of course my remarks necessarily have to be confined to the second paper, or that of Dr. Kirkland, which I also enjoyed very much.

Dr. Ernest Felber (Atlanta): I enjoyed Dr. Kirkland's paper very much. I won't keep you long. I just want to call your attention to one characteristic sign of horseshoe kidney that may easily be discovered by excretory urography. This sign makes it possible for the x-ray man or any doctor to diagnose horseshoe kidney without cystoscopy.

The characteristic sign is the displacement of the kidney pelvis with its outlet; normally the kidney pelvis with its outlet is pointing towards the spine, but in horseshoe kidney towards the lateral abdominal wall. The ureter is also displaced and runs far more laterally from the spine and psoas muscle; normally the ureter runs very close and almost parallel to the psoas muscle. I repeat that the lateral displacement of kidney pelvis and ureter is characteristic for horseshoe kidney and when present in films taken after intravenous injection of contrast media, the diagnosis of horseshoe kidney is secured. The pathologic specimen presented by Dr. Kirkland shows the characteristic displacement.

To make the diagnosis without x-ray is very difficult, but there is one symptom almost characteristic for horseshoe kidney and that is the complaint of young people of epigastric pain associated with tachycardia in getting up in the morning.

The pressure of the isthmus of the horseshoe kidney on the aorta may be responsible for pain and tachycardia.

STREPTOCOCCIC DISEASE IN A COMMUNITY

Reporting a study in an army camp in which was determined the incidence of scarlet fever due to various strains of hemolytic streptococci. Morton Hamburger, Jr., M.D., Field Director of the Army Medical Department's Commission on Air-Borne Infections, and Carolyn H. Hilles, M.S.; Virginia G. Hamburger, B.S.; Margaret A. Johnson, M.S., and Joanna G. Wallin, B.S., Camp Carson, Colorado, point out in *The Journal of the American Medical Association* for February 26 that "The establishment of the relative ability of various strains of hemolytic streptococci to reduce scarlet fever is of considerable epidemiologic importance. Scarlet fever is a reportable disease in practically all communities whereas other forms of streptococcic disease are not. If the ratio of cases of scarlet fever to the total cases of streptococcic pharyngitis-tonsillitis can be established for the various serologic types, a yardstick will be available for the estimation of the total amount of streptococcic disease in a community during a given season. The information provided by such estimations would be of great value in the study of the epidemiology of rheumatic fever and other conditions associated with the hemolytic streptococcus. . . ."

PRIMARY ATYPICAL PNEUMONIA OF UNKNOWN CAUSE

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It is the purpose of this paper to present (1) a clinical review of 54 cases of primary atypical pneumonia of undetermined cause, all seen and treated at the U. S. Naval Hospital, Charleston, S. C., during the past four months; and (2) case reports illustrating the clinical variations and outlining the natural course of the disease. A review of the literature is not included as such a complete review of the subject has been presented in recent months by Finland and Dingle¹ and by Dingle et al².

These patients were admitted to wards reserved for acutely ill medical patients, primarily acute respiratory infections, and were examined routinely.

Atypical pneumonia of unknown cause as described in this paper is an acute respiratory infection of unknown cause with an associated atypical pneumonic lesion in the lung. The diagnosis of primary atypical pneumonia of undetermined cause was established by clinical, laboratory and roentgenographic examinations. The roentgenographic examination is the most important of the three and is unquestionably the most accurate method of making an early diagnosis. It is probable that many cases go unrecognized if roentgenograms of the chest are not made. It has been our practice to make a roentgenographic examination of the chest on every patient admitted to the hospital with an acute respiratory infection. The laboratory contributes negative information in arriving at a diagnosis in this disease. In the sputums studied in this group of cases no known etiologic agents were demonstrable. The clinical course of the disease and the physical findings that developed in the lungs confirmed the roentgenographic diagnosis. Thirty-six of the patients were between eighteen and twenty-five years of age, while

18 were between the ages of twenty-five and forty and only 1 patient was above forty years of age. Attention has been called to the fact that the disease primarily attacks younger adults. Whether the above figures verify this observation is difficult to say as it would be necessary to know the percentages of the various ages represented in the Navy in this given area. Forty-six of the patients were enlisted men, while 8 were officers. All of the patients were white.

Of the group reviewed 29 were in the Navy, 16 were in the Coast Guard, 4 in the Marine Corps and 5 were in the Royal Navy. The men came from widely scattered ships and stations and at no given time have several patients from the same station been in the hospital. The chief complaint most frequently noted was cough occurring in 44 instances. Headache was present in 27 patients, chilliness in 20, feverishness in 19, sore throat in 11, aching in 10 and pain in the chest in 7. The symptoms most frequently noted in the histories were cough, feverishness, headache, chilliness and general malaise. Three of the patients had frank hemoptysis, bright red blood being present in the sputums. Bloody sputum otherwise occurred rarely and consisted of blood-streaked sputum. The onset of the disease was usually insidious occurring over a period of several days. Symptoms had existed one day in 8 cases, two days in 11 cases, three days in 11 cases, four days in 13 cases, five days in 7 cases, while 4 patients had symptoms seven or eight days prior to admission to the hospital.

On physical examination often very few positive physical findings were present and rarely could the diagnosis of a consolidation in the lung have been made on admission to the hospital on the physical findings alone. Frequently the chest was re-examined after the roentgenograms had demonstrated the presence of an area of infiltration in the lung and the lesion could not be located on physical examination. This may be due in part to the fact that usually the consolidation is small and deeply placed in the lung coming out from the hilum.

Pharyngitis was noted in 33 cases and

an area of fine localized rales was present in 25. Conjunctivitis, severe enough to be treated was present in 12 cases; rales were present in the lungs in 16 cases and diminished breath sounds and ronchi were present in six instances each. In 24 cases the lungs were entirely normal on physical examination at the time of admission. In these cases, usually by the third to the fifth day after admission, an area of fine rales would be heard in the involved area with the breath sounds usually diminished. In only a few instances did we note bronchial or tubular breathing. Cough was a prominent symptom in most cases throughout the disease and as resolution took place it usually became productive. During this phase ronchi and widely scattered rales were heard and in a few instances the lungs seemed "wet." The pneumonic lesion was usually located in the lower lobes, occurring in the left lower lobe in 19 cases and in the right lower lobes in 14 cases. The right upper lobe was involved in 7 cases, right middle lobe in 6, the left upper lobe in 3, while in 5 cases the lesions were bilateral.

On admission to the hospital all the patients had elevated temperatures except 2 who were normal. In 34 cases the temperature ranged from 100 to 102° F., while 12 were above 102 and 2 were 105°.

Within three days after hospitalization the temperatures were normal in 18 cases with an additional 29 cases who had normal temperatures by the seventh day. In only 2 cases did the temperature last longer than twelve days.

The white blood count varied, being below 6,000 cells in 4 cases, from 6,000 to 11,000 in 37 cases, and above 11,000 cells in 13 cases. The polynuclear white blood cells were above 70 per cent in 32 cases. Resolution as shown roentgenographically occurred in 19 cases by the seventh day and in 23 additional cases by the eleventh day, while in 12 cases lesions were demonstrable for more than twelve days. In 3 cases infiltration in the lung, as shown roentgenographically, persisted for forty days or more. The diagnosis of a tuberculous lesion could not be established in these cases.

Symptomatic treatment was given in 34

cases while sulfonamides were used in treating 20 patients. The average hospital stay of patients treated symptomatically was seventeen days while it was thirty-four days in the sulfonamide treated patients. This variation is explained possibly by the fact that in the main sulfonamide therapy was used in the most acutely ill patients and in the group of cases which tended to be prolonged. The duration of hospitalization was from seven to twelve days in 18 patients. Twenty-four patients were hospitalized from thirteen to twenty days and 12 patients remained in the hospital for longer than twenty days.

Report of Cases

Case 1—A 17 year old white seaman second class of the U. S. N. R. entered the hospital on March 7, 1943, complaining of pain in his chest, and cough. On the evening before his admission the patient had a chill and felt feverish. During the night his symptoms grew worse and by the following morning he had generalized aching, general malaise and a harsh dry cough. His health had been excellent and his previous medical history was irrelevant. On admission to the hospital the temperature was 103° F., pulse 110 and respirations 26. The physical examination was negative except for the presence of an acute pharyngitis. The white blood cells numbered 15,150 with 92 per cent polynuclear cells. Roentgenographic study of the chest revealed a small area of clouding or infiltration in the central portion of the right upper lobe coming out from the hilum. A second roentgenogram taken three days later showed the lesion less dense and more diffuse, having spread considerably. On the second day after entering the hospital the temperature became normal while the pulse rate varied from 56 to 72. Routine physical findings were not noted until six days after hospitalization when a circumscribed area of rales was noted in the back over the lower portion of the right upper lobe. The course in the hospital was uneventful; cough was the presenting symptom and the patient was afebrile after the first 24 hours. Complete resolution as shown by the x-ray occurred in seven days and the patient was discharged to duty in twelve days with negative physical findings in the chest. Sulfathiazole treatment was used in this case.

Case 2—A white 34-year-old shore patrol specialist of the U. S. Naval Reserve was admitted to the hospital complaining of cough and generalized aching. About one week prior to admission he developed a sore throat and cold. The sore throat had persistently held on and the evening before admission his throat was quite sore and the temperature was 103° F. For the preceding day or two he had developed a cough. The physical examination was negative except for an acute pharyngitis. The roentgenogram showed a small area of infiltration, present in the right lower

lobe. On admission the temperature was 102, pulse 98, and respiration 24. The white blood cells numbered 9,700 with 72 per cent neutrophils. The temperature returned to normal by lysis in five days. On the fourth hospital day numerous fine rales were present over the lower lobe of the left lung. These rales persisted for nine days. There was a patchy variation in the breath sounds over the same area.

The sedimentation rate was elevated. Roentgenographic study of the chest ten days after the first picture showed almost complete resolution of the pneumonic area. However, fine rales and diminished breath sounds persisted for an additional four days. The patient was discharged from the hospital at the end of fourteen days. Symptomatic treatment was used in this case.

Case 3—A 35-year-old white lieutenant (junior grade) entered the hospital complaining of grippe. For two days he had felt feverish, ached generally and had general malaise and cough. On admission the temperature was normal, an acute pharyngitis was present and the lungs were negative on physical examination. A roentgenogram showed a triangular area of infiltration extending out from the right hilum in the midlung field with the apex to the periphery. The white blood cells numbered 6,900 with a normal differential count. Two days after admission rales were noted in the right midlung field at the right hilum, while the temperature remained normal. Four days after admission a roentgenogram showed considerable extension of the pneumonic process in the right middle lobe. Numerous fine rales were noted in this area with associated diminished breath sounds. The temperature remained normal. Cough, prostration, chilliness and sweats were the presenting symptoms at this time. A roentgenogram taken seven days after admission showed beginning resolution of the process. The lungs were not clear roentgenographically until the fourteenth day after admission. Rales and harsh breath sounds, cough, and weakness were noted for six days after the lung was clear roentgenographically. During this patient's entire hospitalization the temperature was 99° F. only twice and was usually normal; however, he was weak, prostrated, had persistent cough and appeared acutely ill. Symptomatic treatment was used in this case.

Case 4—A 32-year-old white lieutenant entered the hospital complaining of cough, fever, headache and discomfort in his chest. The symptoms had been present for four days and had become more severe in spite of home remedies. On admission the temperature was 99.2° F., pulse 74, and respiration 20. The lungs were negative on physical examination, but the roentgenogram showed infiltration in the basal portion of the right upper lobe. This patient's symptoms gradually became more severe and his temperature increased daily until it was 102.6° on the ninth day. Cough, prostration, and discomfort in the chest were the presenting symptoms. Positive physical findings including impaired percussion, fine rales and diminished breath sounds were noted on the fourth hospital day. Resolution was not complete for seven-

teen days after which time ronchi and rales were present for six days longer. The patient was in the hospital for a period of twenty-three days and had temperature for the first thirteen days. The first three days of hospitalization he was given sulfathiazole which was discontinued because it was not tolerated well and symptomatic treatment was used thereafter. Repeated examinations of the sputum were negative.

Case 5—A 27-year-old seaman second class of the U. S. N. R. came into the hospital complaining of headache. He had gotten sick the day before with headache and had a dry cough. The temperature was 101° F. and the physical examination was negative except for an acute pharyngitis. The white blood cells numbered 8,100 with 67 per cent polynuclear cells. A roentgenogram of the chest showed a small area of pneumonitis or infiltration involving the left first interspace. The patient continued to have fever from 99 to 100 for ten days. Five days after admission there were numerous fine rales at the left apex with rather harsh and high pitched breath sounds present. About this time the cough became productive. Eleven days after admission a roentgenogram of the chest showed partial resolution of the pneumonic process with considerable infiltration remaining in the left first interspace. This patient continued to have productive cough for several weeks although he remained afebrile. The roentgenogram showed thin parenchymatous infiltration and fine rales were present at the apex of the left lung for the next several weeks. Pulmonary tuberculosis was suspected; a number of sputum examinations were made and we were never able to establish the diagnosis of tuberculosis. Approximately two months after admission to the hospital the chest was clear on physical examination and roentgenographically and the patient was discharged to duty.

Discussion

Considerable confusion exists in the minds of the medical profession today about this disease. This is due in part to the number of etiologic agents that have been incriminated in the causation of pneumonic lesions in the lung. That this disease has certain clinical pathologic characteristics in common with psittacosis, ornithosis, Q fever, certain rickettsial diseases, influenzas and possibly other diseases is an established fact. However, the fact remains that there has been occurring in the military and the civil population of this country for the past few years an increasing number of cases of a respiratory infection of an unusual nature with associated pneumonic lesions in the lung, and

as yet no etiologic agent causing this disease has been definitely established. The greatest incidence of the disease has been in the civil and military populations of this country in the past twelve months. Although the clinical features of the disease vary it has been essentially the same disease and it would seem to follow that it has been due to the same etiologic agent and not to a different group of infections occurring here and there.

As shown by our group of cases the usual clinical features of the disease may be outlined as follows: The onset is usually insidious but is abrupt in a small percentage of cases. Frequently an upper respiratory infection precedes the onset and in many of our cases there was the history of frequent upper respiratory infections in the preceding months. The disease usually started with cough, headache, feverishness, chilliness and general malaise. Practically all the patients were febrile on admission to the hospital. The positive physical findings on admissions were pharyngitis, rales, ronchi, diminished breath sounds in the lung and conjunctivitis. In nearly one-half of our cases the lungs were entirely negative on physical examination on admission. It must be remembered, of course, that these patients came into the hospital at varying intervals from the onset of their disease. The course of the disease is that of an acute febrile respiratory infection with cough usually productive after a few days as the most aggravating symptom. In some cases the temperature returned to normal in a few days while in others it persisted for several days. In the main the infection lasted for two or three weeks and the patients were apparently depleted out of proportion to the severity of the disease. Often positive physical findings persisted for some time after resolution occurred.

At no time during the winter have we seen the disease in epidemic proportions. It has usually occurred sporadically. The factors favoring its occurrence seem to be exposure, crowding and repeated exposure to the infection. The disease is probably spread by contact. The loss in man hours to the war effort and the economic loss nationally that have resulted from this disease

in the past twelve months have been staggering. There is probably no greater challenge to the medical profession today than atypical pneumonia.

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DISCUSSION ON PAPER OF DR. MARK S. DOUGHERTY

Dr. T. F. Sellers (Atlanta): Information regarding the clinical behavior of the condition called atypical pneumonia is steadily accumulating. This excellent report brought to you by Dr. Dougherty is an example of the very thorough study and observation being given to this disease from the clinical aspect. In reviewing such literature one is impressed with the remarkable similarity of observations of significant groups of cases. It seems apparent, therefore, that by whatever descriptive name it is called we are dealing with a definite clinical entity. Just how new this disease is, we may never know, or certainly we cannot expect to determine until we have more definite information regarding its etiology. So far, Dr. Dougherty states, the laboratory has produced only negative information. It has been unable, in spite of tremendous effort, to offer any diagnostic assistance except of a negative character. The nearest approach to a diagnostic device is the x-ray, but worthy of mention is the negative effect of the administration of the sulfa drugs.

That atypical pneumonia is communicable by contact has been very well established epidemiologically. Therefore, it must be due to a living microorganism.

While it is too early in the search for the etiologic agent of atypical pneumonia to speak with finality, no evidence whatsoever has been obtained to incriminate bacteria or fungi. Not only have no such suspicious organisms been found, but all efforts to demonstrate bacterial antibodies of any kind have been negative to date.

Certain clinical aspects of atypical pneumonia are suggestive of influenza, but efforts to isolate or demonstrate the antibodies of influenza virus A or B by biologic methods have failed.

The pneumonia of psittacosis or ornithosis in many respects resembles that of atypical pneumonia, especially in regard to the symptoms, physical and x-ray findings, pathologic changes, and course. However, psittacosis is definitely associated with exposure to birds, while atypical pneumonia is not. Also, the virus of psittacosis can be easily isolated, and it produces antibodies both in man and birds which can be readily demonstrated. No evidence of psittacosis virus or its antibodies has been demonstrated in atypical pneumonia.

Another relatively new Rickettsial virus known as Q fever produces a pneumonitis suggestive of atypical pneumonia. This virus also is easily isolated by biologic methods, but it has not been found associated with atypical pneumonia.

Other viruses, such as that of lymphocytic choriomeningitis, and vaccine virus and lymphopathia venereum which naturally or experimentally are known at times to produce pneumonitis have likewise been ruled out for lack of evidence.

The term "virus pneumonia" is now being widely used, on the presumption that since no bacterial etiologic agent can be demonstrated and since it is definitely a communicable infection, it must be due to a virus. The finding of elementary inclusion bodies in lung tissue sections of a few fatal cases also is suggestive of a virus origin. However, in spite of intensive animal experiments in trying to reproduce or isolate a virus, nothing very definite has yet been found. Certain workers, notably Francis of the University of Michigan and Johnson of the Rockefeller Foundation, have produced some slight evidence of the presence of an unidentified agent, but Koch's postulates have yet to be fulfilled.

In conclusion, all that can be said at this time is that "atypical pneumonia is an acute infectious disease transmissible by contact from person to person," but of unknown cause.

"DEVOTED TO THE WELFARE OF THE MEDICAL ASSOCIATION OF GEORGIA"

For some time—perhaps for a quarter of a century, certainly for a long time—this JOURNAL has printed at the top of its editorial pages these words: "Devoted to the Welfare of the Medical Association of Georgia." To whom credit is due for the selection of the words and their arrangement, no one seems to know; but all persons should know that the purpose of THE JOURNAL is to serve the members of the Association and the other citizens of Georgia as well.

True, the material published in THE JOURNAL reflects the thoughts and work of many individuals, and as such there follows differences of opinion. Some of our members believe that all of the material used for publication should be purely scientific as it relates to medicine; others have expressed the opinion that insufficient space has been allotted to material dealing with current events not wholly related to medicine; still others desire that more space be allocated for printing news of a personal nature; and finally, there is one of our 2,006 members whose thoughts about anything published in these columns bring to him sudden derangement of some mechanism which affects his spasmogenic aptitude.

To each of us—all members of the Medical Association of Georgia, an organization almost one hundred years old—let it be said that THE JOURNAL is what we make it. It is for the most part a record of our activities in the medicine of our time, and it can be no better than we make it. As for the editorials that fill these pages, each and every one of them has been, and let us hope will continue to be, "Devoted to the Welfare of the Medical Association of Georgia" and the people whom we serve.

THE PRESIDENT'S PAGE

ORGANIZATION

A county medical society means organization, whether in a city, town, or rural community. Organization means the crystallization of collective thinking. Organization of a group of doctors means discussion of local health problems, and this in turn means better sanitation, better disease prevention and better care of the sick and injured. Compare, if you will, a town in which each doctor is too busy, and what doctor is not busy at this time, that he decides he will not go to his medical society. Several meetings show a small attendance. Soon meetings are discontinued. The spirit of cooperation dwindles, then dies.

No discussions of the latest methods of treatment; no comparison of results with newer drugs; no cooperation with the State Board of Health concerning the disposal of sewage, the draining of stagnant pools, the eradication of malaria, hookworm, typhoid fever, tuberculosis and venereal diseases. Look for a moment at another town of the same size, but whose doctors look forward with eager interest to the regular meetings of the county medical society. Doctors from all over the county congregate to report cases of unusual interest, to compare results of certain methods of treatment, to listen with keen interest to some guest speaker who has a message of recent advances in medical or surgical skill not yet available in medical literature—perhaps a lecture, movie film on some medical or public health subject or a comparison of the effects of the sulfonamides or penicillin in their wonderful life-saving properties that have heretofore baffled medical men.

To top off the program of a live medical society, the Woman's Auxiliary to that society may serve refreshments that will serve to bring the doctors and their wives into closer social and



professional relations than any other way. There are many other advantages belonging to and attending your local society. Lawsuits are defended without extra cost. Group insurance is obtainable at reduced rates and membership in your local society automatically carries membership in the Medical Association of Georgia.

If you are interested in medical men controlling medical affairs in America, be a live member of your local medical society, for in no better way can you combat the socialized practice of medicine and in no better way can you serve your community and your patients.

W. A. SELMAN, M.D.

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**HYGEIA EDITOR POINTS TO NEED OF
CARE IN SELECTING A NAME***Says that More Popular Ones Seem to Run In
Cycles; Cautions Against Those Which
Result In Undesirable Initials*

The importance of exercising care in the selection of a name for a baby is pointed out by Morris Fishbein, M.D., editor of *Hygeia*, *The Health Magazine*, in an editorial in the March issue. Dr. Fishbein says:

"This year more babies will be born in the United States than were born in 1943. The number of births for 1943 was far higher than for 1942. This serves to focus attention on the important problem of what to name the baby. The statisticians in health departments and hospitals know that the popular names for children run in cycles. One year most of the boys will be named Robert, the next year Richard, and then perhaps for a while John will come into vogue. Mary seems the most common name for girls, representing one in 24 of all women. Elizabeth runs a close second with one in 27. Then come Margaret and Helen with one in 40. As proof of the fact that Mary used to be more popular than it is now, the percentage of Marys among women over 40 is much larger. Among women in college in 1927 Elizabeths were more frequent than Marys. Then came Helen, after that Dorothy and Margaret, and in sixth place Marie. Seventh was Katherine, and after that Louise and Ruth, and Eleanor ran tenth.

"Parents who are considering the naming of prospective babies will do well to give thought early to the name that they wish for a boy or the one they wish for a girl, so that the proper name may be filled in promptly when the doctor writes the notification of birth for the health department. A birth certificate is one of the most important items one can possess. It is necessary in traveling abroad, in joining the Army, in going to school, in applying for a position, or in any one of a number of important situations in ordinary life.

"The statisticians who work in health departments get an interesting commentary on the public attitude in regard to naming the baby. A recent collection of birth certificates filed with the Georgia Department of Public Health revealed such tributes to mother nature as Pink Sunset and Icie Rivers; reference to cash in such

names as Good Price, Honest Price and Major Sales; geographical contributions like Georgia Possum, Asia Minor, Whosa Cracker, China Rice, and some twins named Utah and Arizona Reynolds. The hope for the future was expressed in such names as Wash Saturday, Buster Good, and Be Careful McGee. Especially to be noted were Perty Smart, Love Session, Wash Fountain, Rather Bigg, Spanish Dentist, Handsome Mann, Virginia Ham and Aborn Sargent. Perhaps a romantic touch is conveyed in Late Night Mann and Pleasant Feelings.

"People are guided by many influences in choosing names. After World War I Jean was most popular, but she turns up now as Jeanne. When Florence Nightingale was receiving a great deal of publicity, the name Florence led almost all the rest. As an indication of the cycles, Ruth was most common in 1900, fell to ninth place in 1905, and rose to fifth place in 1910. Parents should remember that names, like clothing, go out of style. Flower names like Pansy, Lily and Violet, are rapidly passing out of style, as are also such jewels as Ruby and Opal. Furthermore, certain names come to be associated with occupations, such as Bridget for a cook and Dinah and Jenima for a colored cook. A doctor whose name was First actually named his son Safety. Parents will also do well to remember what happens to names when they are reduced to initials. The Grays should always think twice before naming their boy Henry Oliver because that comes out H. O. G. Modern slang gets a treat when the initials come out S. A. P. or L. U. G.

"Among boys the names William and John are most common, representing one in 20. Then follow James, George, Charles, Harold, Robert, Edward, Joseph and Arthur. Boys names are less susceptible to changing styles than those of girls. The first five on the list have been in that position since 1885. Many a boy was named Percy, Reginald or Algernon when the British influence dominated American aspirations in the early part of the last century. Since this influence has passed, these names have begun to disappear, probably also because the gang on the corner always thought that Percy, Reginald or Algernon meant a sissy.

"The suggestion is therefore emphasized that prospective parents select a suitable name for either a boy or girl as soon as possible and make certain that proper notification of birth and issuance of a birth certificate ensue immediately after the child is born. Will Rogers wrote many years ago, 'I now see that the purpose of a birth certificate is not to prove that you have been born, as I had thought at first. The purpose is to show when you were born, where at and who to.' It shows also the appellation by which you will be known in all your official relationships, to

your family, to your school and to the government throughout your life."

Editor's note. "We is insulted down heah in deah ole Georgie," but the good editor of Hygeia should be congratulated for his fine effort in explaining some of our names. He can rest assured that most of our citizens will not take his remarks too seriously, and that they will continue to think of fish-line instead of Fishbein.

THE WOMEN'S FIELD ARMY IN GEORGIA

The Georgia division of the Women's Field Army of the American Society for the Control of Cancer is now beginning its eighth annual enlistment campaign. The slogan, most effectively used, is "Early cancer is curable," and with this in view the campaign is strictly educational. Through the efforts of the Field Army thousands of lives have been saved; but there are other thousands who have not been reached with the assurance that an early cancer can be cured. They still wait for the dread symptom *pain* to drive them to the doctor.

From the beginning of its work in Georgia the Army has cooperated completely with the medical profession. All problems have been referred to the Executive Committee which is made up from members of the Cancer Commission of the Medical Association of Georgia, the Director of the State Department of Health, and the Director of the Division of Cancer Control of that department.

Through the efforts of the American Society for the Control of Cancer, the Congress of the United States designated April as cancer control month, thus giving national recognition to the work of the society and the Women's Field Army.

The Field Army is well organized and is administered under the direct supervision of the national society. The State division is directed by a state commander, ten district vice commanders and a captain for each county. This is the organization for the enlistment campaign. The entire personnel is enthusiastic not only in enlisting members but in doing direct educational work. Thousands of leaflets have been distributed. Some of these have been furnished by the national society; others have been produced by local physicians. Members of the profession have gladly responded to requests to address groups from all organizations. Lectures, illustrated by moving pictures, lantern slides and charts, have been given all over the State. The press in all sections has cooperated splendidly with space for news stories and editorials. Radio stations have given time for broadcasts of varying lengths.

Beginning in a few weeks studies in cancer control will be given in the public schools of the State. They have been arranged as a part of the science courses and we feel that they will result in great good.

The Field Army has just begun the publication of a bulletin which at present will be issued bi-monthly. It will be distributed to officers of the organization and to a group of friends especially interested in cancer work.

A few weeks ago the Field Army gave to Our Lady of Perpetual Help Free Cancer Home, Atlanta, a donation of \$500. This institution takes care of incurable cancer patients who are unable to pay for hospitalization. There are but three requirements for admission:

1. The patients must have incurable cancer;
2. They must be destitute;
3. They must be of reasonably sound mind.

The Dominican Sisters do *all* the work and cannot care for those who are unable to cooperate. No distinction is made in accepting patients. Any or all who apply are cared for as long as they live.

The State Director of the Women's Field Army was of great assistance in securing the passage of the cancer control act which provides for the treatment of indigent individuals suffering with cancer that can be *cured* or *benefited*. Up to the present time more than 7,500 individuals have availed themselves of the treatment offered by the State-aid cancer clinics located in accessible parts of the State.

The Women's Field Army for the Control of Cancer is doing a notable work in carrying a message of hope to those who suffer with this disease. Through its teachings hundreds are going to their family physician for a physical examination. This means not only that the presence or absence of malignancy may be demonstrated, but that other unsuspected maladies may be revealed. Ignorance and superstition in regard to disease is slowly but surely being eliminated. People are beginning to learn that *pain* is not a necessary accompaniment of a serious disease.

With the Women's Field Army teaching the public the principles of health and cancer control and the State furnishing havens for treatment of cancer in those unable to secure it for themselves, Georgia has attained a high standard that might well be envied by any state or community.

J. L. CAMPBELL, M.D.

COUNTIES REPORTING FOR 1944

Grady County Medical Society

The Grady County Medical Society announces the following officers for 1944:

President—A. B. Reynolds, Cairo
Secretary-Treasurer—J. V. Rogers, Cairo

Hart County Medical Society

The Hart County Medical Society announces the following officers for 1944:

President—A. O. Meredith, Hartwell
Secretary-Treasurer—G. T. Harper, Dewy Rose
Delegate—J. I. Jenkins, Bowman

WOMAN'S AUXILIARY

President—Mrs. Olin S. Cofer, 948 Lullwater Road, Atlanta.

President-Elect—Mrs. W. T. Randolph, Winder.

First Vice-President—Mrs. Ralph Fowler, Marietta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Richard Binion, Milledgeville.

Recording Secretary—Mrs. Chas. Usher, 6 East Liberty St., Savannah.

: OFFICERS 1943-44

Corresponding Secretary—Mrs. H. H. Askew, 1329 Springdale Road, Atlanta.

Treasurer—Mrs. Lucius N. Todd, Rural Delivery No. 2, Augusta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. J. Harry Rogers, 1325 Peachtree St., N.E., Atlanta.

HISTORY OF DOCTORS' DAY

The Woman's Auxiliary, being very proud of its great doctors and their noble work, wish to pay tribute to them: thus Doctors' Day.

"Mrs. C. B. Almand, Winder, Georgia, in 1933, introduced before the Barrow County Auxiliary the following resolution which was adopted:

"Whereas, the Woman's Auxiliary to the Barrow County Medical Society wishes to pay lasting tribute to her doctors, therefore, *Be It Resolved* by the Auxiliary to the Barrow County Medical Society, that March 30th, the day that famous Georgian, Dr. Crawford W. Long, first used ether anesthesia in surgery, be adopted as Doctors' Day, the object being the well-being and honor of the profession, its observance demanding some act of kindness, gift, or tribute in remembrance of the doctors."

"The plan was presented to the State Auxiliary in 1933 by Mrs. E. R. Harris of Winder, Georgia; but was tabled. Later, at the annual state session held in Augusta in 1934 the resolution was adopted.

"In June, 1935, at Atlantic City, Mrs. J. Bonar White, the president of the Woman's Auxiliary to the Southern Medical Association, presented the plan to the National Auxiliary, where it was adopted, and a recommendation made that each state select a day which would celebrate an outstanding medical achievement in their own state. Several states have chosen March 30th as their Doctors' Day in honor of Georgia."

It is, then, most appropriate that the Woman's Auxiliary has chosen March 30th as Doctors' Day. On this day we pay special tribute, not only to our doctors, but also we honor that great son of our State, Dr. Crawford W. Long, the discoverer of anesthesia, who by his fame, distinguished his native State of Georgia, and the nation, by rendering an immortal service to mankind.

MRS. LEONARD RUSH MASSENGALE,
State Chairman of Doctors' Day,
Lumpkin, Georgia.

MRS. RANDOLPH'S MESSAGE

Mrs. W. T. Randolph, of Winder, president-elect of the Woman's Auxiliary to the Medical

Association of Georgia and chairman of organization, has issued the following interesting message to members:

"A call is being made on all doctors' wives to enlist in auxiliary work for the duration. Every community looks to the doctor's wife to be an authority on subjects concerning health and education. She is obligated to speak authoritatively and there is no better source of information than the Medical Auxiliary, since its object as set forth in the constitution is: to extend through its members, the aims of the medical profession to all organizations which look to the advancement of health and education; to assist in the entertainment of all state, district, county and other medical meetings; to promote acquaintanceship among physicians' families that fellowship may increase.

"Every physician's wife owes it to herself and to her husband to become affiliated with the Auxiliary to the Medical Society in some way. May this year see many additions to well established auxiliaries where there have been none to function with the medical society."

FULTON COUNTY

The Woman's Auxiliary to the Fulton County Medical Society held its February meeting at the Academy of Medicine in Atlanta, the president, Mrs. J. Harry Rogers, presiding. Dr. W. A. Selman, president of the Medical Association of Georgia, made a most interesting talk on the work the auxiliary could do in assisting the society. Mrs. D. R. Longino, chairman of the revisions committee, presented the proposed amendments to the by-laws. The president reported she had recently talked on the Wagner-Murray-Dingell bill at a large P.T. A. board meeting. Mrs. Murdock Equen, fifth district chairman for the Woman's Field Army for Control of Cancer, told of the planned drive and announced Mrs. James Brawner and Mrs. D. R. Longino were two auxiliary members who have agreed to assist in the drive. Mrs. Brawner told of a recent trip to Birmingham in the interest of the cancer drive. Later luncheon was served with Mrs. Shelley Davis and the membership committee in charge.

GEORGIA MEDICAL SOCIETY

At the request of the State Auxiliary a new standing

committee, to be known as the war service committee, was formed at a recent meeting of the Woman's Auxiliary to the Georgia Medical Society. Its members are Mrs. C. R. Rayburn, Mrs. H. M. Kandel and Mrs. Lee Howard.

Introduced by Mrs. J. K. Quattlebaum, Maj. C. S. Hammerstrom, chief of the medical staff at Hunter Field, gave an interesting talk on "Duties and Obligations of a Medical Officer in the Army of the U. S. A." A forum in which the members took part followed his address.

Mrs. Lee Howard, public relations chairman, spoke briefly on the recognition day program held recently in Atlanta by the Georgia Division, American Society for the Control of Cancer. She announced the receipt of a merit award by Mrs. R. V. Martin, chairman of the cancer drive for the First district, for outstanding accomplishments in the drive.

Mrs. W. R. Dancy, membership chairman, introduced two new members, Mrs. Tayloe Compton and Mrs. G. H. Johnson, Jr.

The meeting was held at the home of Mrs. S. J. Hall on East Fifty-second Street, co-hostesses being Mrs. Eric Johnson, Mrs. R. E. James, Mrs. John Stalvey, Mrs. S. J. Lange, Mrs. Paul Lucas and Mrs. Leon Holloman.

Announcement was made of the appointment of Mrs. L. W. Williams as chairman for the state convention which will be held in Savannah in May at the meeting of the Auxiliary to the Georgia Medical Society. The auxiliary's annual meeting will take place on April 7 at the home of Mrs. Ruskin King and a nominating committee to bring in a ticket of officers for election was appointed. Serving on it are Mrs. R. L. Neville, Mrs. Charles Usher, Mrs. H. H. McGee, Mrs. A. A. Morrison, Jr., and Mrs. E. F. Rosen. Hostesses for the meeting will be Mrs. King, Mrs. Ralston Lattimore, Mrs. Elliott Wilson, Mrs. G. H. Lang and Mrs. Charles Usher.

Mrs. S. F. Rosen outlined plans for Doctors' Day on March 30. Mrs. Rosen is chairman for the event and others on the committee are Mrs. H. H. McGee, Mrs. E. Carson Demmond, Mrs. S. E. Wilson, Mrs. Charles Usher and Mrs. A. A. Morrison, Jr.

Announcement was made of the coming cancer control drive on April 9-22, of which Mrs. Angus Purvis is chairman.

An informative talk was given by Dr. Austin V. Deibert, United States Public Health Service, director of the Southeastern Medical Center at Oatland Island. He talked on "Professional Care of Patients and Nonmedical Management of Patients at the Medical Center." After his talk he answered questions asked by the members.

The meeting was held at the home of Mrs. Julian K. Quattlebaum with Mrs. Lee Howard, Mrs. E. Carson Demmond, Mrs. Henry Levington and Mrs. W. R. Dancy as co-hostesses.

The Medical Association of Georgia will hold its Ninety-Fourth Annual Session at Hotel DeSoto, Savannah, May 9-12, 1944. The Women's Auxiliary will meet at Hotel DeSoto on the same dates.

DOCTOR SHORTAGE PERILS PUBLIC HEALTH

More than one-third of all the doctors in the United States have joined the armed forces. Thousands of others are still being called out of private practice. Late last year experts warned a U. S. Senate committee that public health would be in danger if the proportion of doctors in the U. S. A. fell below one to every 1,500 civilians. This month, that danger line has been crossed by 23 of the 48 states, *Pathfinder* points out.

"The doctor shortage is at its worst in small towns and in the open country," the article continues. "Even before Pearl Harbor, six states with a population of 11,500,000, largely rural, had less than one doctor for every 1,500 residents. The 23 states with dangerously small proportions of physicians today have a civilian population of 54,500,000, nearly half of the nation's total.

"It takes at least six years to train a doctor for public practice. If the armed forces enlist medical students at the present rate, the nation, according to G. St. J. Perrott and Burnet M. Davis of the U. S. Public Health Service, will be face-to-face with a shortage of another 15,000 physicians to handle normal illnesses, let alone an epidemic or other war emergencies."

Pathfinder's survey reveals that "the darkest spots in the foreground of medical services are those boom towns where war has swelled the population while cutting the number of doctors. Port Orchard, Wash., just across Puget Sound from the Big Bremerton Navy Yard, has a war-time population of about 50,000 with just five doctors to look after them. People wait weeks for an appointment, then wait hours in the doctor's office. Navy physicians at the Yard take care of their own men and help the rest of the town as best they can. But they are not supposed to treat civilian cases outside the yard.

"Down at the opposite corner of the country in Valparaiso, Fla., site of an army air base, about 8,000 people are without any doctor at all. For a while the U. S. Public Health Service maintained a doctor in Valparaiso. But whenever the health service sends a physician to practice among civilians, opposition crops out from influential groups quick to smell 'socialized medicine.' So Valparaiso has no doctor."

While adjustments could be made by doctors moving to localities where their services are most needed "most states compel doctors from other states to take new medical examinations which are usually held only once or twice a year. Only seven states — Delaware, Maine, Nevada, Pennsylvania, Washington and Florida — grant temporary licenses to doctors awaiting examinations.

"More than half of the states won't accept

(Continued on page 87)

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone Walnut 8911; residence, Vernon 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone Walnut 8911; residence, Jackson 7979.

THE SUPERVISED PRACTICE PERIOD IN GEORGIA PROGRAMS OF NURSING EDUCATION

CARRIE M. SPURGEON, R.N.

Educational Supervisor, Board of Examiners of Nurses for Georgia

The Georgia schools of nursing are now making plans for a four-months' period of special experience to be offered to senior students. From now on the senior practice will cover a period of six months in keeping with regulations of the Cadet Corps program. This special practice period is planned for all students, both cadet and noncadet students since the same program throughout is offered both groups.

The Army and federal services are planning programs for this group, and students who choose such an assignment are given first preference. The school of nursing makes further assignments in accordance with the school's requirements for graduation. The supervised practice period is a service assignment during which time the student learns to perfect her nursing skills and at the same time gain the knowledge of her field of special interest. The school assigning the student must make sure that the student's performance will be carried out under expert guidance. This holds true whether the student is retained in the home school or assigned to an outside institution or agency.

In the home school the student may be directed in methods of management of a hospital unit, and act as assistant head nurse; in methods and of clinical teaching or operating room management and act as assistant to the clinical instructor or operating room supervisor; in methods of classroom teaching and function as assistant to one of the classroom instructors.

Outside institutions and agencies for senior supervised practice which have been approved to date by the Board of Examiners of Nurses for Georgia are as follows (others will be added as approval of them is given):

State Tuberculosis Sanatorium, Alto, Georgia, offering experience and instruction in nursing care of patients suffering with tuberculosis; emphasis is on the surgical treatment and public health aspects.

Milledgeville State Hospital, Milledgeville, Georgia, offering experience and instruction in the care of patients suffering from various types of mental disorders; emphasis is on the newer methods of treatment and care. Conferences and clinics are used in the program of instruction.

State Department of Public Health Nursing with participating county units: Fulton County Public Health Nursing Department, experience and guidance in the current methods of public health nursing service (other counties will be added to the list as approval is given).

Tentative approval:

Lawson General Hospital, Atlanta.

Veterans Administration Facility, Atlanta.

The general plans submitted by the latter two have received favorable consideration by the Board of Examiners, and final plans for the program are expected to be approved very soon.

It is believed that the supervised practice period in the plan of nursing education is a step toward better preparation for the student and motivation for further study in the field of special interest. In preparing nurses more readily for the armed forces in this manner, the basic program is also strengthened.

CORRECTION

On the NIB RELEASE of February 15, 1944, in the item, page 1, headed "The Cadet Nurse Corps" please change the sum \$9,333,933 to \$49,333,933 so that the first sentence will read: "As of January 13, 1944, \$49,333,933 of the \$52,500,000 appropriated by Congress had been allotted by the Nurse Education Division of the U. S. Public Health Service for the basic programs of 980 schools of nursing."

DOCTOR SHORTAGE PERILS PUBLIC HEALTH

(Continued from page 85)

doctors who do not have American college degrees. This automatically keeps out all the 6,000 foreign and refugee doctors now in the U. S. A. Some 2,000 of these have become American citizens. Many, with first papers, have been licensed by New York, Massachusetts, California, Ohio, New Jersey, Connecticut and Maryland.

Various proposals, which the article discusses, lack congressional action to put them into effect.

"Cutting the Army and Navy medical staffs would help civilians immediately and directly. With a European invasion coming, nobody seems quite prepared to ask the armed forces to get along with fewer doctors."

Summing up the situation, *Pathfinder* says: "America is inadequately prepared to resist what can be termed a major invasion by the oldest, deadliest, most treacherous of all enemies—sickness and calamity."

NEWS ITEMS

The Georgia Medical Society, Savannah, met on February 22. Major Robert J. Needles, M.C., read a paper on "Meningococcic Meningitis," which was discussed by Dr. J. R. Broderick and Dr. Ruskin King.

Dr. Elizabeth Martin announces the opening of her office at 756 Cypress Street, N. E., Atlanta. Practice will be limited to gynecology and obstetrics.

The Florida Medical Association will hold its next convention at St. Petersburg April 13-14. Princess Martha Hotel will be headquarters.

Dr. Orlen J. Johnson, member of the Council on Industrial Health of the American Medical Association, Chicago, announces that there will be a definite need for active planning and participation by the Committee on Industrial Health of the Medical Association of Georgia.

Dr. W. A. Selman, Atlanta, president of the Medical Association of Georgia, spoke before a meeting of the Woman's Auxiliary at the Academy of Medicine, Atlanta, on February 11.

Dr. A. J. Davis, former Emanuel County Commissioner of Health, has resigned and accepted the office of the Richmond County Commissioner of Health.

Dr. James E. Paullin, Atlanta, president of the American Medical Association, spoke before a meeting of the Atlanta Civitan Club on February 8.

Dr. E. C. Hamblen, Durham, N. C., professor of gynecology at Duke University School of Medicine and gynecologist at Duke University Hospital, held a clinic at the Good Samaritan Clinic, 17 Alexander Street, N. W., Atlanta, February 10.

The annual dinner of the Georgia Medical Society, Savannah, honoring Dr. J. Reid Broderick, immediate

past president, and Dr. E. J. Whelan, new president, was held on February 8. Talks were made by Dr. Broderick, Dr. Whelan, Dr. W. V. Long, and Dr. J. K. Quattlebaum. Dr. Ruskin King gave a travelogue entitled, "Ge Go Exploring." Dr. G. L. Touchton spoke on "That's Not the Way I Heard It."

Dr. W. D. Jennings, Augusta, has resumed his practice after an illness of short duration.

Dr. J. Palmer Mayo has moved to Eastman and will engage in practice in Eastman and Dodge County.

Dr. John D. Wiley has joined the staff of the Scott Hospital at Milledgeville.

Dr. F. C. Wilson, Valdosta, has been appointed chairman of the First Aid Service of the Lowndes County Chapter of the American Red Cross.

The Southeastern Regional Conference on Social Hygiene was held at the Biltmore Hotel, Atlanta, February 23, under the auspices of the American Social Hygiene Association, the United States Public Health Service, The Social Protection Section, Federal Security Agency, the Georgia Social Hygiene Council, and the Georgia State Department of Public Health. The Conference area included Alabama, Florida, Georgia, North Carolina, South Carolina and Tennessee. Georgia physicians on the program included: Dr. T. F. Abercrombie, Dr. L. M. Petrie, Dr. Frank K. Boland and Dr. W. A. Selman.

Dr. James E. Paullin, Atlanta, president of the American Medical Association, spoke before the Sixth Annual Congress on Industrial Health at the Palmer House, Chicago.

The Bibb County Medical Society met recently at the entrance of the Naval Ordnance Plant, Macon, and made a tour and inspection trip over the entire plant.

The Fulton County Medical Society held a special meeting at the Academy of Medicine, Atlanta, March 30. Dr. Russell L. Haden, Chief, Medical Division, Cleveland Clinic Foundation Hospital, Cleveland, Ohio, spoke on "Leukemia."

Dr. B. H. Minchew, Waycross, spoke on "Socialized Medicine" before a meeting of the Waycross Bar Association February 24.

Dr. Sterling H. Jernigan announces the opening of offices in the Buckhead Theater Building, 3110 Roswell Road, N. W., Atlanta.

Dr. G. R. O'Daniel, formerly of Blue Ridge, has been employed on the staff of the Boston City Hospital, Boston, Mass.

The medical and surgical staff of the Georgia Baptist Hospital, Atlanta, met on March 21. Dr. Major Fowler, chairman of the Clinico-Pathological Committee, arranged the program.

The Georgia Medical Society, Savannah, met on March 14. Dr. Robert B. Greenblatt, Southeastern Medical Center, Savannah, read a paper entitled, "The Induction of Menstrual Bleeding in Amenorrheic Women."

OBITUARY

Dr. George Leon Smith, Swainsboro; member; University of Georgia School of Medicine, Augusta, 1881; aged 83; died January 4, 1944. He was a native of Washington County. After he graduated from Mercer University, Macon, he began the study of medicine. After more than 50 years' practice in Emanuel and adjoining counties he retired. Surviving him are his widow, one daughter, Mrs. Frank Schmidt, Miami, Fla.; and one son, Dr. D. D. Smith, Swainsboro. Rev. Byron Kennerly, Rev. Charles S. Durden and Rev. H. C. Griffin officiated at the funeral services conducted at the residence. Burial was in the Methodist Cemetery on Coleman Street, Swainsboro.

Dr. Hulett Hall Askew, Atlanta; member; Emory University School of Medicine, Emory University, 1918; aged 50; died on February 20, 1944, suddenly of heart disease. He was born and reared in Carrollton and was from one of the best and most highly esteemed families of that section. He began practice in Carrollton and surrounding community for a few years and then moved to Atlanta where he practiced medicine with success until his unexpected and untimely death. Dr. Askew was a member of the Civitan Club, Southeastern Surgical Congress, Southern Medical Association, Fellow of the American College of Surgeons, American Medical Association, and the Carrollton Baptist Church. Surviving him are his widow, one daughter, Mrs. Dodge Mentzer, Augusta, one son, Sergeant Price Merritt, with the U. S. Air Corps in England; three sisters, Mrs. C. C. Carter, Mrs. Clyde Hargrett, and Mrs. Louise Sumlin, all of Atlanta; two brothers, Lieut J. Thomas Askew, Iowa City, Iowa, and Dr. Rufus A. Askew, Atlanta. Dr. Louie D. Newton and Dr. Ferguson Wood officiated at the funeral services. The pallbearers were: Dr. Ben H. Clifton, Dr. Claude Griffin, Dr. Olin S. Cofer, Dr. C. W. Roberts, Dr. Edgar D. Shanks, Dr. Weyman Sloan, Dr. Marion Pruitt, Dr. W. E. Person, Dr. Howard Hailey, Dr. W. A. Selman, Dr. F. C. Holden, Dr. Chas. E. Lawrence and Dr. B. L. Shackelford. Internment was in West View, Atlanta.

Dr. Richard S. Watkins, Columbus, Ga., and Phenix City, Ala.; Vanderbilt University School of Medicine, Nashville, Tenn., 1881; aged 85; died January 29, 1944. He was born in Russellville, Alabama, the son of Judge and Mrs. Richard S. Watkins. Judge Watkins was one of the foremost citizens in that section. Dr. Watkins enjoyed an excellent practice in Phenix City and Columbus. Surviving him are four daughters, Mrs. W. W. Weaver, Anniston, Ala.; Mrs. C. W. Ford, Montgomery, Ala.; Mrs. J. A. Summerlin and Mrs. J. L. Harris, Columbus. Funeral services were conducted from Trinity Methodist Church in Phenix City.

Dr. Charles Carroll Fishburne, Darien; member; Emory University School of Medicine, Emory University, 1914; aged 59; died on February 3, 1944, in a private hospital at Jacksonville, Fla. He was born in Bamburg, S. C. He began practice in Darien, then moved to Brunswick where he practiced for a number

of years, then returned to Darien where he practiced until disabled. He was held in high esteem by many friends in Glynn and McIntosh counties. Served in various city offices of Darien and one time was coronor of McIntosh County. He was a successful practitioner and a good citizen. Surviving him are his widow, one daughter, Mrs. Frank S. Doremus, Darien; one son, Lieut. Chas. C. Fishburne, Jr., Dyersburg, Tenn. Dr. Frank S. Doremus officiated at the funeral services conducted from St. Andrews Episcopal Church, Darien. Burial was in St. Andrews Cemetery.

Dr. Guy Fleming Spearman, Atlanta; member; Atlanta College of Physicians and Surgeons, Atlanta, 1910; aged 63; died March 8, 1944, in a private hospital of pneumonia. He was born and reared at Social Circle, a member of a large family. His was one of the pioneer families of Walton County and had the respect and esteem of all acquaintances. They were known over a wide area for their honor and upright character.

After Dr. Spearman graduated in medicine, he interned in Atlanta hospitals, then practiced in Atlanta until a fatal illness overtook him. He was on the staffs of the Crawford W. Long Memorial Hospital, Georgia Baptist Hospital and St. Joseph's Infirmary. He was a member of the Fulton County Medical Society, Southern Medical Association, American Medical Association, Scottish Rite Masons and the First Presbyterian Church. Surviving him are his widow, two sons, Cadet Guy Fleming Spearman, Jr., U. S. Army, and Corporal Robert T. Spearman, U. S. Marine Corps; two sisters, Mrs. Emma Gresham, Hamilton, and Mrs. W. H. Hurst, Macon; four brothers, R. E. Spearman, Macon; J. F. Spearman, Anniston, Ala.; W. B. Spearman and Dr. W. D. Spearman, both of Social Circle. Dr. William V. Gardner officiated at the funeral services conducted at Spring Hill Chapel. Some of the pallbearers were Dr. Calhoun McDougall, Dr. C. C. Aven, Dr. Ben H. Clifton; doctors of dental surgery, Thad Morrison and W. A. Clarke. Burial was in West View Cemetery, in charge of Palestine Lodge No. 486, F. & A. M.

COUNTIES REPORTING FOR 1944

Monroe County Medical Society

The Monroe County Medical Society announces the following officers for 1944:

President—W. J. Smith, Juliette
Secretary-Treasurer—G. H. Alexander, Forsyth

Polk County Medical Society

The Polk County Medical Society announces the following officers for 1944:

President—O. R. Styles, Cedartown
Vice-President—S. M. White, Cedartown
Secretary-Treasurer—Grace R. Ross, Cedartown
Delegate—W. H. Lucas, Cedartown
Alternate Delegate—S. L. Whitely, Cedartown

Montgomery County Medical Society

The Montgomery County Medical Society announces the following officers for 1944:

President—W. M. Moses, Uvalda
Vice-President—J. E. Hunt, Anniston, Ala.
Secretary-Treasurer—J. W. Palmer, Ailey
Delegate—H. C. Sharpe, Alston

Laurens County Medical Society

The Laurens County Medical Society announces the following officers for 1944:

President—E. B. Claxton, Dublin
Vice-President—Chas. L. Hicks, Dublin
Secretary-Treasurer—O. H. Check, Dublin
Delegate—C. A. Hodges, Dublin
Alternate Delegate—R. G. Farrell, Jr., Dublin

Cherokee-Pickens Counties Medical Society

The Cherokee-Pickens Counties Medical Society announce the following officers for 1944:

President—J. T. Pettit, Canton
Secretary-Treasurer—D. M. Cornett, Canton
Delegate—Grady N. Coker, Canton.

Ware County Medical Society

The Ware County Medical Society announces the following officers for 1944:

President—J. E. Penland, Waycross
Vice-President—W. P. Stoner, Waycross
Secretary-Treasurer—Kenneth McCullough, Waycross
Delegate—W. F. Reavis, Waycross

Mitchell County Medical Society

The Mitchell County Medical Society announces the following officers for 1944:

President—J. G. Crovatt, Camilla
Vice-President—M. M. Burns, Pelham
Secretary-Treasurer—D. P. Belcher, Pelham
Delegate—J. C. Brim, Pelham

Hancock County Medical Society

The Hancock County Medical Society announces the following officers for 1944:

President—Horace Darden, Sparta
Secretary-Treasurer—H. L. Earl, Sparta
Delegate—C. S. Jernigan, Sparta

Crisp County Medical Society

The Crisp County Medical Society announces the following officers for 1944:

President—H. J. Williams, Cordele
Vice-President—L. E. Williams, Cordele
Secretary-Treasurer—A. J. Whelchel, Cordele

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J. L. CAMPBELL, M.D.

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MEMORIAL EXERCISES

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We are here to honor our friends departed — to review their memories, to extol their virtues, to recount their deeds of valor, in war — in peace — at home and abroad. Their services as citizens and their loyalty as physicians are punctuating every thought we have of them. As we love them and praise their accomplishments, we have but to look about us to recall our comrades of yester-year. In the seat by your side, in the one across the aisle or possibly in the one on the rostrum, sat a much admired friend, who is absent today because the grave reaper has waved his wand, wielded his scythe. Such an assembly as this one must be marked by sad reflections on the recent past and a serious realization of the near future, for:

Life is a one way journey, through vales and tears;
Through swamps and meadows, over hills of hopes and fears;

Over sunny paths and magic, through fields of green and gold;

In shadowed ways and tragic, through forests dark and cold.

Life is a crazy symphony, built on a crazy scheme;
And, for all its wondrous music, there is no major theme;
Its over-tones of gladness, would hearten men like cheers;
But under-tones of sadness would drown the soul in tears.

Life is a short sharp struggle, with needs of praise and blame;

With laurel wreaths of victory, and scarlet bands of shame;

With gain of great achieving for the gallant and the brave;

With loss beyond retrieving for the coward and the knave.

On this memorable occasion we pay respect especially to the members of our

Medical Association of Georgia, the work (services) of the self-sacrificing physicians of today; and the glory of those who have entered the boat with the silent oarsman to cross the "River Eternal." We wish also to pay respect in general to the medical profession as a whole throughout this country, who labor so faithfully during these times that break men's hearts and try men's souls. Be they young medical men at the battle front or older medical men at home, we shall keep their memories fresh "Until the stars grow old, and the earth grows cold, and the leaves of the Judgment Book unfold."

For what Life lights our feeble flesh?

What spark is within the clod?

What is the unseen cosmic force

We call by the name of God?

May I present to you for a few moments, a vision in story, of the sphere of the medical men of today? Although a bit embellished, it is based on facts and incidents which have happened.

On the outskirts of a charming little village, overlooking the majestic sea, lies a picturesque, old-fashioned home, with white sides, red roof, green blinds, and stately columns. It is situated on a beautiful knoll in a setting of sweet-scented flowering gardens. At the moment, it is eventide. The full moon has risen in the East and its reflection on the gentle sea could be observed from the mansion's windows. The squawk of the sea birds and the unending roar of the sea surf on the rocks at the promontory were the only sounds to be heard except the song of the nightingale from yonder tree top singing to its nearby mate. In front of the mansion where the landscape slopes gently onto the smooth glistening beach, there was to be seen the gold tinted wavelets as they curled landward, out of the

restless sea through the scintillating moonlight.

The night was chilly and clear. Within the mansion all was calm, peaceful, quiet and cozy. As the night wore on, there sat in a great arm chair — slightly reclining — the figure of an elderly physician — retired from the practice of medicine because of age and infirmity, after years of professional service in the community — a service well done.

Out of respect and admiration for his great deeds of kindness, there came a chorus of Negro voices in serenade from without, chanting familiar old songs of the Southland. It never occurred to him as to why these were sung. After a little while silence again reigned supreme and there he sat, gazing into the great log fire which sparked and crackled while its flames lighted the handsome countenance of the gray-haired old man, revealing his wrinkles, worn furrows and other evidences of the hard won struggle of life. Studying the flashes of flame as they rose and fell, the little sparklets in the soot on the rear of the chimney, the tiny outbursts of flame as air pockets exploded in the wood and the glow of the burnt embers, the old physician happily reflected on his medical career, on his many and varied experiences and on his unselfish services to mankind. Each little outburst of flame, and the gyratic creepers on the fireback suggested new thoughts. His fertile mind dwelt through the years, recalling many happy memories, serious situations, intricate operations, valuable services in behalf of humanity — in combating suffering and death — a happy evening of reflection — one of peaceful reminiscence.

The night wears on — the flames subside — the glow lessens and the burning embers fade as the brilliant coals grow pale — the physician's eyes close and he passes into peaceful slumber, which lasted through the night.

From this he was not aroused until the morning was well spent. He was suddenly awakened by the ringing of church bells, the chatter of children and the popping of fire crackers—for it was Christmas morn, and all about him was happiness. His children

and grandchildren, overjoyed with presents of all kinds and the anticipation of more from the supply at the giant Christmas tree. Under the tree were numerous gifts for the doctor from admiring friends and relatives. Many called to visit this adored physician. They brought babies for him to see, potatoes, chickens and other farm products as presents, and one little girl brought her sawdust dolly for the physician to operate upon for appendicitis because it had had colic all night.

While surrounded by family, friends and presents and revelling in the happiest of days, a messenger calls and delivers a cablegram. The contents reveal that a son, who himself was a young medical officer, was seriously wounded and suffered a fractured leg when his ship, a destroyer, was torpedoed but not sunk in the Southwest Pacific. The message also commended the young man in a laudatory manner for his pluck and fortitude in going among the wounded and administering medical aid, although suffering intensely from his several injuries. The pride of being the father of such a son rose in the breast of the aged man. The brave had from the bravest descended. Greater love hath no man than that he would suffer such an ordeal and give his life for his countrymen.

A man with the heart of a human
Cared he not that he wounded be,
Only that other injured
Could from pain be free.

W. R. D.

Another message—a son in Guadalcanal, a captain in the medical corps, is on the phone. He tells of being sent by plane to aid the battlescarred heroes of Guadalcanal. The plane was shot down by the Japanese over the open sea, which was infested by sharks. The rubber life raft saved him and the plane's crew — a torpedo boat carried him to his station on the island where he served these troops needing medical attention.

Still another message came. This time by radio transmitted from the battlefields of North Africa. The War Department related the experiences of a third son in the

medical corps. Many wounded lay on the battlefield to the rear of the allied advancing troops, in Lybia. The young officer in the medical corps of the United States armed forces hastened to help the wounded. He, with no protection or cover, was attending a soldier in the open desert, beyond the call of duty, when an enemy plane dropped a bomb near him, destroying both physician and patient. All were depressed for the moment.

Then an automobile stops before the house. The door bell rings. Some one enters and there is great joy. The oldest son, a physician of the United States medical corps, and a daughter, a nurse, attached to the medical nursing corps, have arrived. He had a bandaged hand and walked with a crutch because of a fractured leg. They were both fresh from the battlefronts and they promptly seated themselves about the aged physician in a quiet nook in the lovely garden where each recounted deeds of valor performed by the medical men of our armed forces. Said the lovely daughter-nurse: "I must tell you, Dad, of a wonderful service performed by a great medical officer of Georgia. This was told to me by a nurse who escaped from the Philippines. 'Colonel William B. North, with a few medical enlisted men, slipped into Fort Stotsenberg near Manila after it had fallen to the Japanese and loaded a Kinyoun-Francis sterilizer on a truck. He then went to the hospital and took from it all the dressings and instruments that he could get. These he brought to Camp Cabcaben, Hospital No. 2 at Bataan, which was a large hospital that had been set up under the trees. This sterilizer was used throughout the battle of Bataan. The details of this story are still shrouded in silence for the present.' Colonel North was born Sept. 13, 1901, in Georgia, graduated from Vanderbilt University, Nashville, Tennessee, in 1927 and was commissioned in the Army of the United States in 1928.

"Not only the officers," said she, "performed great deeds; also the men in the line follow their example. You must know about Private Edward Zatz, a private in the medical corps. He was presented with the award of the Silver Star for gallantry

in action in 1942 at Guadalcanal. While an aid man for one rifle company to which his duties had been fulfilled, Private Zatz rushed into enemy fire lanes in an adjacent section and succeeded in carrying to safety three severely wounded men of another rifle company and administering aid, thereby saving the lives of two of them.

"And say, Dad, there was another private of the medical corps, A. G. Jones, cited for gallantry in action, Nov. 21, 1942, on Guadalcanal, and was awarded the Silver Star. It happened that two men, who had advanced beyond the lines, were seriously wounded, unable to return and in great danger of losing their lives. The proximity of the enemy was immediate, the hour was noon, the terrain consisted of rough coral and steep ridges, covered with jungle growth. Private Jones, with total disregard for his own life and safety, advanced beyond the lines, in the face of continued heavy enemy fire and brought back both wounded men to safety, thereby saving their lives."

The son, resting more comfortably, remarked that they should learn of the pluck of Lieutenant John N. Garratt and Captain Bruce H. Bennett, both of the medical corps. Lieutenant Garratt was awarded the Legion of Merit for performing an outstanding service in July, 1942, when ships, anchored off a port in West Central Africa were transferring cargoes to lighters. Word was received on shore that three enemy submarines were operating in the vicinity. How to transmit the warning to the ships was a problem because radio communication was silenced and no seagoing lighter was available to carry the news. Lieutenant Garratt volunteered to go in a river launch, crossing a most dangerous bar (locally such a procedure had not before been risked), going alone and refusing company, he made the trip just before dark, gave the message to each ship and then returned across the bar in total darkness. Lieutenant Garratt was also awarded the Soldiers' Medal for swimming ashore on three different occasions to carry lines from sea-going lighters stranded on the bar. His bravery inspired the crews.

Then as to Captain Bruce H. Bennett, he was awarded the Oak Leaf Cluster for the Silver Star for gallantry in action, at Port Moresby, New Guinea, on May 9, 1942. While its crew was preparing a B-25 for the take-off, a P-39 aircraft stopped near the bomber because of sudden engine failure, a flight of enemy Zero fighters approached the field without warning and began to strafe the two planes, both of which immediately caught fire. The pilot of P-39 and two crew members of B-25 were able to leave their planes, but three bomber members were still inside the craft. Despite the fact that three flights of enemy Zero fighters had reached their airdrome and were circling for another attack, which was broken up by our fighters, Captain Bennett, with complete disregard for his own life, immediately rushed to the aid of the stricken crew members. His courage and devotion to duty in the face of enemy fire are in accord with the highest standards of the Army Air Medical Corps.

Then Dad tells them his story of Lieutenant Colonel James O. Gillespie, who was cited for exceptional meritorious services in the Philippines. His whereabouts is not known. Colonel Gillespie remains on the list of those missing in action in the Philippines, in the absence of an official list from Japan of its prisoners.

And Dad also mentions the splendid work of Brigadier General Edgar King of the medical corps who has been awarded the Distinguished Service Cross for caring for the wounded in Hawaii at the time of the Japanese attack on Pearl Harbor. He carried out his plan with such consummate skill as to save an unprecedented proportion of the wounded, elicit the admiration of the medical world and bring distinction upon the medical department of the Army.

"Dad," said the son, "there have been many heroic deeds, so courageously and fearlessly performed that I shall not tire you with any more, but to mention only the outstanding deeds of two men, namely: Major Lemuel E. Day and Sergeant Frederick E. Kosack, both of the medical corps. Major Day received the Silver Star for gallantry in action in New Guinea, where he

bravely cared for the sick and wounded, entirely oblivious of his personal safety. While his open air hospital was being bombed and strafed by enemy planes, Major Day, although exhausted to such a degree that he was ordered to the rear by his commander, refused to leave and continued to administer to the needs of his patients. It is recorded that Major Day died Dec. 22, 1942, fifteen days after he was wounded. Sergeant Kosack's citation at the time he was presented with the Silver Star for gallantry in action reads as follows: noteworthy, was his care of Major Daniel Edwards, whom he covered with mattresses and whose life undoubtedly was saved thereby, as the hospital tent in which he lay was riddled with projectiles, many being killed and wounded.

At this moment, and typical of the physician's life, the aged doctor is called to a seriously ill case. The stories of war heroes ended. Several hours of arduous work were required to save his patient, after which he returned to his home, thoroughly exhausted and near collapse, filled however with the satisfaction that he was doing his part in the great war effort.

And now that his days are well nigh spent,
He finds in his heart a great content,
He has added to the sum of human good,
He has served his fellows as best he could.

He resumes his seat in the great arm chair in the library, peered out of the western window at the fading sunlight, as the sun set in a blaze of crimson glory — and there, stricken, he awaited the sunrise of the morning of Eternity, as Death looked gigantically down from Heaven's ebon vault.

In this simple manner an effort has been made to portray and illustrate some of the spheres in which the physicians labor today and many of the magnificent deeds they are accomplishing under the stress of war. These men of Destiny — these medical men of our country have for years relieved the suffering, uplifted the down-hearted by their skill, ushered into the world living beings like you and I, rocked the cradles that fostered future generations and sat by the bed-

side as the embers of life faded into a faint glow, and then were no more.

"Duty," said General Robert E. Lee, "was the sublimest word in the English language." And none live up to its meaning with greater loyalty than the men of medicine in Georgia.

He has won what gold cannot buy
Affection that will not, cannot die;
And many will say as his life they scan,
Thus God would do, were God a man.

With such instances of superhuman endurance and professional loyalty to duty, let us give thanks for such brave comrades, our praise for their fortitude and our prayers for those who mourn their passing.

While we extol the many deeds of the profession as a whole, we must with pride realize that our fellow medical men of Georgia are an integral part of many great deeds of service and sacrifice which have been performed; and as these splendid men of the profession are reported "missing in action," each leaves behind a host of sorrowing comrades, a great vacancy in a cultured home, a loving memory in the hearts of his former patients and, when war shall cease — when real peace is restored, the memory of these noble characters will be revered and esteemed.

There will now be placed before you the names and the pictures of our heroes in the field of medicine from our great State of Georgia — members of our Association who have crossed to the other shore, passed up the river of Perfect Peace, to the Haven of Eternal joy and happiness — into our Father's House.

Adams, Frank L., Elberton, May 3, 1942, aged 74.
Andrews, William Walter, Tucker, July 18, 1942, aged 74.
Avary, James Corbin, Atlanta, October 19, 1942, aged 86.
Belflower, Hinton Miller, Sycamore, December 3, 1942, aged 65.
Blanchard, Cluese A., Augusta, November 7, 1942, aged 72.
Boring, James R., Canton, November 29, 1942, aged 64.
Bowdoin, Joseph P., Atlanta, August 6, 1942, aged 76.
Burgess, Pleasant Lewis, Bowdon, March 14, 1943, aged 61.
Cater, Robert L., Perry, September 16, 1942, aged 76.
Chappell, Guy, Dawson, January 15, 1943, aged 68.
Cheney, James Newton, Silver Creek, January 28, 1943, aged 77.

Churchill, Charles White, Thomson, October 26, 1942, aged 64.
Cranford, Oscar G., Sasser, October 25, 1942, aged 76.
Curry, James Walker, Rome, July 11, 1942, aged 67.
Deadwyler, Madison Pope, Maysville, December 3, 1942, aged 69.
Dorminy, Andrew Cornelius, Hoboken, March 19, 1942, aged 61.
Fitts, Charles Cowdrey, Carrollton, November 8, 1942, aged 48.
Floyd, John Thomas, Atlanta, September 2, 1942, aged 61.
Franklin, Rufus Cecil, Swainsboro, December 4, 1942, aged 61.
Frazer, John Lipscomb, Fitzgerald, August 9, 1942, aged 76.
Harbin, William Pickens, Sr., Rome, November 4, 1942, aged 70.
Harris, Raymond Victor, Savannah, January 23, 1943, aged 63.
Henley, James Thomas, Douglasville, October 27, 1942, aged 72.
Heyward, Arthur R., Warwick, August 3, 1942, aged 72.
Holmes, Walter B., Wadley, September 25, 1942, aged 73.
Jenkins, James Columbus, Hartwell, February 1, 1943, aged 68.
Kea, Victor Emanuel, Atlanta, May 20, 1942, aged 52.
Lamar, Lucius, Dawson, June 9, 1942, aged 71.
Lewis, James Barnett, Waynesboro, October 24, 1942, aged 54.
Lowry, Tanner, Cartersville, July 6, 1942, aged 62.
Murphy, Marion W., Ringgold, February 25, 1943, aged 78.
New, James E., Dexter, December 11, 1942, aged 65.
Odom, William Walter, Lyons, January 29, 1943, aged 71.
Orr, Jake Cobb, Buford, May 16, 1942, aged 56.
Pinkston, John W., Greenville, December 14, 1942, aged 82.
Ross, James Thweatt, Macon, December 22, 1942, aged 82.
Shelley, William P., Albany, October 23, 1942, aged 86.
Smith, Donald F., Atlanta, June 23, 1942, aged 67.
Smith, Edward Cooper, Donalsonville, March 15, 1943, aged 59.
Smith, James A., Lyerly, August 27, 1942, aged 85.
Standifer, William Bryan, Blakely, June 25, 1942, aged 86.
Thomson, John Danner, Atlanta, November 10, 1942, aged 63.
Toepel, Theodore, Atlanta, March 12, 1943, aged 74.
Walling, Cadow B., Collins, December 6, 1942, aged 72.
Waring, Thomas Pinckney, Savannah, January 8, 1943, aged 76.

Let night be black when the Spectres call,
Let the billows heave and moan;
Let wild winds howl and sharp hail fall,
When my soul sets out alone.

Or if not night when Death rides by,
Grant then that the Day is dark;
Let grey clouds lower in a wintry sky,
When my naked soul shall embark.

For I who have loved the warmth and light,
The sunny skies and the gold;
It were better far to embark at night,
Or on a stormy day and cold.

THE DAY IS DONE

EDGAR ALLEN POE

The day is done, and the darkness
Falls from the wings of Night,
As a feather is wafted downward
From an Eagle in his flight.

I see the lights of the village
Gleam through the rain and the mist,
And a feeling of sadness comes o'er me,
That my soul cannot resist.

A feeling of sadness and longing,
That is not akin to pain,
And resembles sorrow only
As the mist resembles rain.

Come, read to me some poem,
Some simple and heartfelt lay,
That shall sooth this restless feeling,
And banish the thoughts of day.

Not from the grand old masters,
Not from the bards sublime,
Whose distant footsteps echo
Through the Corridors of Time.

For, like strains of marital music,
Their mighty thoughts suggest
Life's endless toil and endeavor;
And tonight I long for rest.

Read from some humbler poet,
Whose songs gushed from his heart,
As showers from the clouds of summer,
Or tears from the eyelids start;

Who through long days of labor,
And nights devoid of ease,
Still heard in his soul the music
Of wonderful melodies.

Such songs have power to quiet
The restless pulse of care,
And come like a benediction
That follows after prayer.

Then read from the treasured volume
The poem of thy choice,
And lend to the rhyme of the poet
The beauty of thy voice.

And the night shall be filled with music,
And the cares that infest the day,
Shall fold their tents like the Arabs,
And silently steal away.

MYCOTIC ANEURYSM

Report of Two Cases

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Mycotic or bacterial aneurysms are produced by bacterial inflammation of the wall of a blood vessel. They may arise from an infected embolus within the lumen of the vessel, an infected thrombus of the vessel wall, or from inflammation of tissues contiguous to the vessel wall. They may be secondary to acute endocarditis, but are most often secondary to subacute bacterial endocarditis. Infections of lung and bone are the most frequent source of bacteremia in the absence of endocarditis. In addition to the streptococcus viridans, other bacteria such as staphylococci, pneumococci, meningococci, influenza bacilli and gonococci have been reported as causative organisms.

Stengel and Wolferth¹ collected from the literature 217 cases of mycotic aneurysm in which 86.7 per cent were secondary to endocarditis. Brindley and Schwab² reported an incidence of 2 cases of mycotic aneurysm in 100 cases of aortic aneurysm. Crane³ reported an incidence of 3.6 per cent in 152 cases of aneurysm at the Boston City Hospital from 1912 to 1937. In Abbott's⁴ series of 200 cases of coarctation of the aorta, 14 per cent died of infected endarteritis with the formation of a mycotic aneurysm. Richey⁵ reviewed 41 cases of aortic aneurysm in persons under 18 years of age and found mycotic lesions in 20 cases. Hermann⁶ found 17 reports of cases of mycotic aneurysm in persons under 10 years of age. Packard⁷ quotes Leubarsch as reporting an incidence of 10.2 per cent of mycotic aneurysms in 137 cases of subacute bacterial endocarditis.

The aorta is the most common site of formation of mycotic aneurysm. The superior mesenteric, hepatic, splenic and cerebral vessels are frequently involved,

After the reading of the name, date of demise and age, a deep-toned gong was sounded. During the address the playing of chimes added to the impressiveness of the ceremony.

From the Cardiovascular Section of the Lawson General Hospital, Atlanta.

while the peripheral vessels are less frequently involved.

The pathologic process arises from infection of the vessel wall, whether from within the lumen, within the wall, or from outside the wall. When the inflammatory process arises within the lumen of the vessel, infected emboli or thrombi may be found. There is destruction of the intima and internal elastic lamina. An inflammatory reaction with infiltration of the media with polymorphonuclear leukocytes may be seen. Often bacteria may be demonstrated in the tissue. As healing occurs, a round cell infiltration and fibroblastic proliferation may be noted. Areas of abscess formation and necrosis are not uncommon and may give rise to rupture of the vessel wall. The size of the aneurysm varies from a few millimeters to several inches. At times, a false aneurysm is formed. Extensive necrosis may obliterate the blood vessels so that identification is difficult. Erosion into an adjacent vein may give rise to an arteriovenous aneurysm. Rupture of the aneurysm may cause fatal hemorrhage.⁸

Reports of cases of mycotic aneurysm of the peripheral vessels are not common. Recently two patients with this condition were observed at the same time in the Cardiovascular Section of the Lawson General Hospital. It is our desire to report these cases, showing their essential clinical features and the findings at autopsy.

Reports of Cases

Case 1.—H. W., a white private, aged 22, who enlisted in the Army Jan. 12, 1940. The following two years of military service were spent in the United States, the Panama Canal Zone and Ecuador. On Feb. 13, 1942, while in Ecuador, he was seized with sharp, precordial pain while playing ball. This was followed by chills and fever. All symptoms then subsided, over a period of 48 hours. Because of inadequate hospital facilities he was flown by plane to the Gorgas Hospital, Ancon, Canal Zone, where he was admitted on Feb. 16, 1942. His history there revealed no previous attacks of rheumatic fever or chorea.

Physical Examination.—There was a slight cyanotic flush to the face; the fingers were cyanotic but there was no clubbing. Visible pulsations were seen in the vessels of the neck. Examination of the heart showed a heaving, precordial impulse. A systolic thrill was palpable over the aortic area, associated with a tambour second sound and a systolic and diastolic murmur. A

presystolic thrill was palpable over the mitral area, associated with a rumbling presystolic murmur.

Laboratory Studies.—The erythrocyte and leukocyte counts were normal. The urine and stool were normal. The blood Kahn reaction was negative. The sedimentation rate was 9 mm. for one hour. The nonprotein nitrogen was 29.5 mg. per 100 cc. of blood. The basal metabolic rate was plus 10. The electrocardiogram showed slurring of R_1 and slight notching of the P_1 and P_2 . The P-R was normal. X-ray examination of the chest showed the heart and lungs to be normal.

Course in Hospital.—The patient ran a septic type of temperature and steadily became weaker. The clinical diagnoses were: (1) valvular heart disease, with aortic insufficiency and mitral stenosis and insufficiency, rheumatic type; (2) chancroid of the penile corona, onset Feb. 21, 1942, cured Feb. 27, 1942. The patient remained at the Gorgas Hospital until March 7.

Second Admission.—He was then transferred to the Albrook Station Hospital, Albrook Field, Canal Zone. Records are not available of his stay in this hospital.

Third Admission.—The patient was subsequently transferred to Lawson General Hospital and admitted on May 24, 1942. He complained of headache, stiffness and soreness of the right ankle and knee. There was a history of frequent sore throats throughout life and a penile sore which lasted three days in February 1942, and which was diagnosed as being chancroidal in type.

Physician Examination.—The patient was acutely ill but in no apparent discomfort. The lips were cyanotic. The skin was muddy in color, and there were numerous small, pigmented, melanotic spots over the trunk. No petechiae were seen. The lungs were normal. Examination of the heart showed a forceful, apical impulse, which was visible and palpable in the 4th intercostal space, 2 cm. beyond the midclavicular line. At the mitral area, the first sound was split. A short, mid-diastolic murmur was heard. At the aortic area, a loud blowing diastolic murmur, occupying all of diastole, and a short systolic murmur were heard. The diastolic murmur was transmitted down the left border of the sternum and was diminuendo in character. The pulses were equal and forceful and were Corrigan in type. The arterial blood pressure was 122/30. The liver, kidneys and spleen were not palpable. There were no objective joint changes, but there was slight pain on motion of the right ankle. The reflexes were essentially normal, except for absence of the knee jerks.

Laboratory Studies.—The erythrocyte count was 4,670,000; the leukocyte count was 6,950. The urine was normal. The blood Kahn reaction was negative. Sedimentation rates varied from 10 mm. to 54 mm. for one hour. The nonprotein nitrogen was 30 mg. per 100 cc. of blood. Eight positive blood cultures were obtained for the streptococcus viridans. Cultures preceding death were negative. Electrocardiograms showed evidence of progressive myocardial damage, left deviation of the electrical axis and a gradual increase of the QRS complex. X-ray studies of the chest showed normal lungs and a progressive enlargement of the left ventricle.

Course in Hospital.—The temperature was septic in type, ranging to 103° F. and 105° F. at times. The pulse rate varied between 70 and 120. Embolic phenomena

were prominent. Petechiae were found on numerous occasions in the sclerae and in the skin. The fingers were painful and swollen at times. There were emboli to the liver, kidneys, spleen and brain. Sulfapyridine and sulfadiazine therapy were tried but without apparent beneficial effect. The patient experienced considerable pain in the right knee and hip throughout his stay in the hospital. On July 22 there was excruciating pain in the right hip which was considerably swollen. A bruit could be heard posterior to the anterior superior iliac spine. There was a slight expansile pulsation over this swollen area. It was felt that the patient had a mycotic aneurysm resulting from a septic embolus to a branch of the right iliac artery. The pain was considered as being caused by erosion of the ilium. On one occasion the patient expectorated blood which was considered to be due to pulmonary embolism with infarction, and perhaps bronchopneumonia. Oxygen was administered. Considerable morphine and sedative were given to relieve pain. The heart murmurs remained essentially unchanged. The patient became hoarse and could not speak above a whisper for two weeks preceding death. The facial, carotid, radial, popliteal, dorsalis pedis and digital arteries showed marked pulsation. A loud, pistol shot sound was heard over the dorsalis pedis arteries. Ten days preceding death the right leg became paralyzed below the hip and remained so until death. Excruciating pain was felt in the right knee, hip and heel. The right dorsalis pedis artery was cord-like and hard. It could be seen to pulsate in a snake-like manner and the force of the pulsation seemed to strike the examining finger with considerable shock. The temperature, pulse and blood pressure fell gradually. The patient remained conscious and fairly rational until a few hours before death, on Oct. 2, 1942. The clinical diagnoses were: (1) valvular heart disease with aortic insufficiency and mitral stenosis and insufficiency, rheumatic in type; (2) subacute bacterial endocarditis, due to the streptococcus viridans; (3) mycotic aneurysm of an undetermined branch of the right iliac artery.

Autopsy Findings.—The right gluteal region was swollen and the skin was somewhat hyperemic. There was pitting edema of the right leg. The heart weighed 560 Gm. and was definitely enlarged. The left ventricle was dilated extensively. The pericardium was normal. The myocardium was normal except for an area of necrosis in one of the papillary muscles of the left ventricle. The aortic valve was the site of many friable, frond-like yellow, gray vegetations projecting from the free margins of all the cusps. These vegetations extended for a short distance on the under surface of the aortic leaflet of the mitral valve. This leaflet also showed some thickening of the free edge. The other leaflet of the mitral valve appeared normal. The cordae tendinae were not thickened. There was one small vegetation on the endocardium of the septum of the left ventricle. There was some roughening of the lining of the coronary vessels. No occlusion was present. The aortic valve measured 10 cm. in circumference, and was definitely insufficient; the pulmonary valve measured 6 cm.; the mitral valve 11 cm.; and the tricuspid valve 12 cm. The left ventricle averaged 1.5 cm. in thickness, while the right ventricle averaged 0.4 cm. The right gluteal region was the site of a massive hematoma. About 1000 cc. of

an old and recent blood clot were evacuated. There was some erosion of the periosteum of the sciatic notch of the ilium. The bleeding apparently arose from one of the gluteal arteries, but no definite aneurysmal wall could be seen. The spleen weighed 350 Gm. There was a yellow infarct in the lower pole measuring 2.5 cm. in diameter. Sections from the region of the gluteal artery showed degeneration of the adjacent muscle. Throughout the muscle there was some old blood pigment. No aneurysmal wall could be seen. Sections of the spleen showed a septic infarct. Culture of the heart valve revealed the streptococcus viridans. The pathologic diagnosis was: (1) subacute bacterial endocarditis, involving the aortic valve, due to the streptococcus viridans; (2) chronic rheumatic heart disease; (3) aortic insufficiency; (4) hematoma of the right gluteal muscle; (5) septic infarct of the heart and spleen.

It was felt that the hematoma in the right gluteal region resulted from a ruptured mycotic aneurysm, although no vessel could be demonstrated in the degenerated tissue and blood clot.

Case 2—J. C., a white private, aged 21 was inducted into the Army March 5, 1941, and was later stationed at Camp Forrest, Tennessee. He felt well until August, 1941; while on maneuvers in Arkansas, he developed weakness, chills, fever, easy fatigability and drowsiness. These symptoms continued over the next several months, and persisted later while at home on furlough. Upon returning from furlough he was admitted to the Station Hospital at Camp Forrest, Nov. 17, 1941, with the complaint of weakness, chills and fever. The past history revealed that in 1930 he had a painful swelling of the right ankle, which lasted for a few days.

Physical Examination.—The temperature was 101.5° F. The pulse rate was 110. The skin was clear. No rashes were present. No petechiae were seen. Both lung fields were normal. The arterial blood pressure was 105/60. Examination of the heart showed the apex impulse to be forceful in type and to be visible and palpable in the 5th intercostal space. No thrills were palpable. The left border of cardiac dullness was within the midclavicular line. The rhythm was regular. On auscultation, at the apex a systolic murmur and a rumbling mid-diastolic murmur were heard. The physical examination otherwise was normal. The reflexes were normal.

Laboratory Studies.—The erythrocyte count was 4,230,000. The leukocyte count was 18,050. The urine and stool were normal. The sedimentation rate was 24 mm. per hour. Malarial smears were negative. Repeated blood cultures were positive for the streptococcus viridans. X-rays of the chest showed the heart and lungs to be normal. The electrocardiogram showed simple sinus tachycardia with no evidence of myocardial damage. The P-R interval was normal.

Course in Hospital—The patient ran a septic type of temperature which ranged between 98° F. and 103° F. The pulse varied between 70 and 140. A total of 167 Gm. of sulfathiazole and 187 Gm. of sulfapyridine were administered without beneficial effect. He developed a secondary anemia for which transfusions were given on three occasions. Emboli to the brain, kidneys and spleen were thought to have occurred at different times and

occasional petechiae were noted. Convulsions occurred on two occasions, accompanied by weakness of the left side of the body and dysarthria. He developed a mild peripheral neuritis while on sulfapyridine and the drug was discontinued. There was weight loss of 18 pounds. He remained at Camp Forrest until May 9, 1942.

Second Admission.—The patient was then transferred to Lawson General Hospital and admitted on May 9, 1942. He complained of weakness and soreness in the right lower quadrant.

Physical Examination.—The temperature was 102° F. The pulse was 120. He appeared chronically ill and markedly emaciated. There was wasting of the subcutaneous tissue. The eyes were sunken. No petechiae were present in the sclerae or skin. There was no cyanosis or dyspnea. The fingers showed early signs of clubbing. A hacking cough was present. Numerous rhonchi were heard throughout both lung fields and crepitant rales were heard at both lung bases. Examination of the heart at the apex showed a presystolic thrill associated with a snapping first sound and a systolic murmur transmitted towards the axilla. A low pitched mid-diastolic rumbling murmur was present. At the base, the pulmonic second sound was accentuated and a systolic murmur was heard. A presystolic gallop rhythm was noted. The spleen was not palpable. There was bilateral ankle clonus.

Laboratory Studies.—The erythrocyte count was 4,000,000. The leukocyte count was 11,300 with a moderate shift to the left. The urine on several occasions showed many red blood cells and white blood cells. There was no albumin. The sedimentation rate was 54 mm. per hour. The blood Kahn test was negative. The nonprotein nitrogen was 30 mg. per 100 cc. of blood. Blood cultures were positive for the streptococcus viridans on numerous occasions. X-rays of the chest showed marked hilar and peribronchial infiltration throughout both lungs. The heart had a globular configuration and was enlarged. The electrocardiogram and sound tracing showed evidence of myocardial damage, simple sinus tachycardia and a presystolic gallop rhythm.

Course in the Hospital.—The patient continued to run a septic type of temperature ranging between 97° F. and 105° F. The pulse rate varied between 100 and 155. Frequent showers of petechiae were noted in the skin and in the sclerae. On June 16, 1942, a pulsating nontender mass measuring 4x4 cm. in diameter was noted in the left popliteal space. There was a slight bruit over the mass which continued to increase in size to that of a large hen egg. After a time the pulsations disappeared. On one occasion the patient complained of a dull aching over this mass. Subsequently he developed signs of congestive heart failure with an enlarged liver and pitting edema of the arms and legs. Progressive enlargement of the heart was noted during the hospital stay. The patient developed Cheyne-Stokes respiration and lapsed into coma during the last 24 hours preceding death on Aug. 22, 1942. Terminally, many subcutaneous hemorrhages occurred over the body.

Autopsy Findings.—A chronic, rheumatic endocarditis with stenosis of the mitral valve was found. On the auricular surface of the mitral valve were multiple greenish-gray, papillary vegetations, which extended on

to the auricular endocardium. There were old infarcts in the kidneys, spleen and brain. The aortic valve measured 6 cm.; the pulmonary valve, 7 cm.; the mitral valve, 7 cm.; and the tricuspid valve, 11 cm. The left ventricle averaged 1.3 cm. in thickness, while the right ventricle averaged 0.4 cm. There was an aneurysm of the left popliteal artery situated at the point of bifurcation of the anterior and posterior tibial arteries. It measured 5x6 cm. in diameter. The wall was extremely thin and it was filled with a disintegrating reddish, gray blood clot. The adjacent fibula showed slight saucerization. Another similar aneurysm 2.5 cm. in diameter was situated in the midportion of the left external iliac artery. The right common iliac artery was occluded by an antemortem blood clot which was superimposed on two ragged areas of mural thrombosis, each about 1 cm. in diameter. One was situated at the point of bifurcation of the external and internal iliac arteries; the other was about 3 cm. proximal to this point. In this region there was a firm gray plaque 4 mm. in diameter just beneath the intima.

Sections of the popliteal artery showed scarring of the muscular coat with a perivascular round cell infiltration. The intima was destroyed. No acute inflammatory reaction was noted.

Summary

Two cases of mycotic aneurysm of the peripheral arteries complicating subacute bacterial endocarditis are presented. In one case there were multiple aneurysms.

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WASHINGTON OFFICE OPENED

An Office of Information in Washington, D. C., was opened on April 3 by the Council on Medical Service and Public Relations of the American Medical Association. *The Journal* of the Association reports in its April 8 issue. It is located in suite 900, Columbia Medical Building, 1935 I Street, Northwest. A large number of booklets, pamphlets and other published material are being sent to Washington, where they will be readily available to those desiring information concerning the various fields of medicine and the activities of the Association.

A STUDY OF BASAL METABOLIC RATES AND ASSOCIATED CONDITIONS IN A COLLEGE GROUP

MARIAN E. FARBAR, M.D.
Valdosta

In the fall of 1936 the freshman class of the Georgia State Woman's College at Valdosta was used for a study in metabolic values and correlations, with the hope that a four-year contact might be had with the majority of the group. Although participation in the program was entirely voluntary, 113 of the 124 students cooperated in a spirit of good campus sportsmanship, and, as volunteer patients, exhibited that fearless relaxation so necessary for good metabolic work.

The Benedict-Roth machine and the *Du-bois Normal Standards* were used in the research study.

The original interest centered in correlations of metabolic findings with I. Q. ratings, body-build, and energy output plus physical endurance.

Student I. Q.'s had been determined by the American Council Psychological Examinations for College Freshmen. Subsequent quarterly student grades were regularly available; and extremes of high and low grades were particularly noted.

Pryor's Width-Weight Standard was used, as it is thought to be a truer yard-stick than those which do not take width into consideration.

As no standard was available for the study of energy output, only very general observations will be made.

In the above mentioned group of freshmen, there were 32 girls with basal metabolic rates varying from —10 to —27 per cent who were in the upper half in I. Q. scores, while only 15 students ranging from —10 to —21 per cent were in the lower

half. Surprisingly, this did not fit with the picture of short statures and dull students, and there did not seem to be any correlation between intelligence rating and moderate highs and lows in metabolimetry.

Indeed, the second highest student out of 113 in intelligence, with a raw score of 273, was the lowest in oxygen combustion, with a basal metabolic rate of —27 per cent — a tall girl of long bone, low physical endurance, allergic type — which again ran contrary to expectations. Metabolic work subsequent to that done on this freshman group showed frequent basal rates from —10 to —20 per cent, and occasionally lower, in long-boned women and girls, with various syndromes belonging to the suboxidation picture.

It became apparent, quite early in this study, that there were a greater number of "lows", 86 of the 113 students, than "highs", only 25 — with two at 0. All instruments, technic, and calculations were checked again and again for accuracy; and it was concluded that the average normal metabolic rate in the South is lower than the usually accepted norm of from —10 to +10 per cent. Other such studies have confirmed this opinion.

It is quite apparent that temperature and humidity influence rate of combustion; however, daily changes in weather are taken care of in the barometric-temperature readings, and correction is made for each test, giving quite constant results as exemplified by the readings on the normal control subject, done repeatedly in testing the instrument. On the other hand, the continued residence of an individual or of several generations of people in a given area, undoubtedly influences rates of combustion with sequences of physical events, as pointed out in *Climate and Weather Rule Health*,¹ and *Climate Makes the Man*.²

Miss Catherine L. Newton, of the Home Economics Department, University of Georgia, working on a group of 55 students, got —9.1 per cent as an average basal metabolic rate, whereas the average B.M. rate of this apparently healthy student group at G. S. W. C. was —8.4 per cent. Assuming a range of ten points above and ten below

Health Service, Georgia State Woman's College, Valdosta.
Read before the Medical Association of Georgia, Atlanta,
May 14, 1943.

the average, might not figures in the minus "teens" be considered quite normal for this climate?

When body-build was considered, it was found that the ratio of the long-bone type (66 inches or taller) having a basal rate from -1 down to -27 per cent, was 3 to 2 greater than that of the short stature students (63 inches or shorter) running rates from -1 to -25 per cent. It must be remembered that college freshmen are little more than at the late puberty age, with readjustments still incomplete, as shown in both physical and temperamental traits; and also that the interrelationship of the thyroid gland and the anterior pituitary gland in bone growth is not fully known.

We were not sufficiently encouraged by the above findings to report them, but from this group study and our subsequent metabolic work there have come some correlations which are interesting and worthwhile for a preliminary report, and deserving of continued study. They make up a sequence of the suboxidation syndrome: "lows" in blood pressure, body temperature,³ pulse rate, and hemoglobin percentage. In other words, retarded tissue ventilation lowers body heat, slows the heart beat, which in turn, lowers blood pressure, especially the systolic. In young people, peripheral resistance seems to hold up well, and diastolic pressures are, as a rule, normal. The average systolic pressure was 110; the diastolic, 76. Generally, the low pressures were in those students whose B.M.R. was also low, -18 to -27 per cent, the few exceptions being overweight girls with comparatively low basal rates, and systolic blood pressures from 120 to 140, possibly indicating thresholds of hypertension at menopause. One more associated "low", though not quite so constant, is low specific gravity and alkaline reaction found in urinalysis. It is conceivable that the million malpighian bodies in the cortex of each kidney, dependent upon the cardiovascular system for osmotic pressure force, cannot put out the volume of dissolved solids.

In our hemoglobin work, we used the Tallquist color chart. On one freshman

class we tried Hellige's modification of the Sahli method and ran parallels on each student; they were sufficiently consistent for us to accept the former for our routine work, as it is a time saver. The average for this group was 71.6 per cent. The severer degrees of secondary anemia occurring in students with low oxygen combustion and blood pressures were slightly lower than those accepted as normal.

The record of visits to the dispensary and of the days spent in the infirmary by this research group suggests the frequency of the following morbid entities: respiratory and intestinal irritations;⁴ the various types of allergy such as migraine, and skin irritations, including the frequently occurring acne; intestinal and uterine cramps, as well as amenorrhea and menstrual irregularities. The involuntary muscle of the arteriole and venule of the uterine mucous membrane, in the periodic increased demand on it, is just as likely to be thrown into spasm by some food allergy, as is the intestinal tract muscle — hence cramps; and, the doctor who faces the fact and also tries to overcome the normally increased permeability of the capillary at this time by cutting down on the salt intake, will get results. The need of proper endocrine and vitamin therapy is also quite apparent.

The student who fatigues easily, hence proving a lessened degree of physical endurance: From this class come the "spring breaks" so well known to the college health staff. These students are often subject to asthenia, generally, though not always, the tall, thin type with basal rates lower than -20 per cent and a moderate to severe degree of hypotension, and frequently victims of food intoxication, or food allergies.

A dormitory furnishes an observation point for the study of rhythmic recurrences in this distressing, though not serious malady, which helps locate the offender, and is the first step in the prevention of further attacks so important from an economic standpoint in both college and industrial work.

It is quite apparent that there is an association between borderline "lows" in endocrine output, vitamin deficiencies, and

sensitiveness of various tissues to certain foods in many individuals who are never very ill, never very well, but who may live to be more than the Biblical three-score years and ten. If we, as doctors, are awake to a few important facts along this line and can get the cooperation of our patients, we can serve not only the individual patient but can materially aid in the absentee problem of the day.

Conclusions

1. It is suggested that basal metabolic rates may be normally about eight points lower in this climate.

2. Mental aptitude does not seem to be influenced by a moderate degree of suboxidation.

3. A considerable number of long-boned individuals are borderline "lows" in thyroid secretion.

4. There is an association between deficiencies in endocrine secretions and vitamins with food allergies and intoxications which, because of the frequency in occurrence, make up a severe degree of absenteeism.

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SUCCESSFUL SURGICAL REMOVAL OF SPLEEN OF A PREGNANT WOMAN

The successful surgical removal of the spleen (splenectomy) of a woman eight months pregnant is reported in *The Journal of the American Medical Association* for March 18 by David Polowe, M.D., Paterson, N. J. The pregnancy was complicated by a disease of the blood in which there are hemorrhages beneath the skin forming purplish spots (thrombocytopenic purpura hemorrhagica) and which is accompanied by a tumor of the spleen. In the case reported by Dr. Polowe, a large tumor was found in the spleen. The operation was performed on October 27 and on November 29 the patient was delivered of a normal female infant about two weeks prior to estimated term.

As Dr. Polowe points out, thrombocytopenic purpura hemorrhagica is a very serious complication of pregnancy, with fatal mortality rates running as high as 64 per cent and maternal mortality rates almost 100 per cent.

GEORGIA DOCTORS, READ AND THINK

More men are being drafted for service in the armed forces; more doctors must guard their health! Indeed, recently the United States Navy announced that it would accept for limited duty doctors up to 55 years of age, thus releasing younger, physically fit doctors for service in combat zones. This will help but even this program will not meet the present demands for military needs. Twenty-five per cent of the medical graduates each year are physically disqualified for military duty.

The Journal of the Indiana State Medical Association, in its November 1943 issue, gave such concise presentation of this subject that I believe it worth reprinting. What is true in Indiana is true in Georgia. Read Indiana's *Future Medical Needs*, and by all means think:

"Brigadier General George F. Lull, Deputy Surgeon General, in addressing a group at the recent State Association convention, made the frank statement that 'if the global war continues for a long time, more physicians will be in the armed services and fewer physicians will be available for civilian needs.' General Lull made some other statements that should be read by physicians everywhere, one of them 'The American soldier is getting better treatment than in any previous war, and a large majority of them are getting better care than they ever got back home.'

"The Procurement and Assignment Service has officially declared the need for additional enlistments in the Medical Corps; Indiana will be asked to furnish more than two hundred of this group. We already have reached the point where this added number of medical men withdrawn for practice in the state will prove a hardship in many instances. Already there are sections that are not any too well supplied with medical care within the immediate vicinity. Just what the solution will be becomes another problem.

"A Procurement and Assignment official has offered the following as a possible solution, and it contains so much merit that we append it hereto:

Patriotic Obligation—The Disqualified Doctor

"The nation is confronted with its greatest emergency entailing an unheard-of drain on its resources, not the least of which is that of manpower. Whatever contributes to winning the war should be our primary consideration. Relegated to secondary consideration or no consideration at all are matters of personal convenience and individual welfare.

"Hundreds of doctors have entered military service from Indiana, and thousands from the country in general. They sacrificed lucrative practices and home comforts and financial considerations, if preserving the ideals we

are fighting for can be denominated a sacrifice. We have only begun to fight; we have only begun to have casualties; we have not yet reached the maximum of expansion of armed potentialities; in the expansion yet to come and for replacements many medical officers will be needed. This means that Indiana will be called upon to supply additional medical officer personnel. Largely these must come from defense plants and local communities where those declared essential but physically eligible for duty with the armed forces are now employed, and who *must* be released for such duty through allocating to these locations those who are physically ineligible. Through consent to such allocation the disqualified doctor will be meeting a need on the home front and making a material contribution to the war effort, which after all is his patriotic duty. Those of us not yet in the war have been privileged to enjoy what is largely a heritage handed down to us through the sacrifice of our forefathers, to which we have contributed little and for which we owe something. The time has now come to make a payment on account. The question is, shall we do this voluntarily or shall we wait until pressure is brought to bear and in a way forcing us to do what we should eagerly seek to do without coercion.

"The day is near at hand when by voluntary or forceful means resort must be had to allocating of the disqualified doctor. There are already many areas and local communities where doctors are urgently needed to meet the inadequate medical coverage of the civilian population. The home front is largely covered by older doctors. These doctors are having their efficiency lowered; they are unequal to the task they have assumed — many of them returning again to practice from retirement. They are becoming disabled; they are dying. All these things mark an increasing demand for doctors on the home front. This can be met *only* from the ranks of the disqualified doctor. Seventy-five per cent of the new graduates are entering the armed forces, the other 25 per cent being disqualified. This leaves only about 1500 for the nation's needs, whereas formerly there were 5,000.

"As time goes on, we must look to the future. What is going to be the situation three to five years from now, when the ranks of the older men on the home front now carrying a load by effort that can not be sustained will have further depleted? Just because the young graduate applied for a commission and was found to be ineligible is no extenuating circumstance nor in any way implies that he has no further obligation in the war effort. He is being asked to make no sacrifice. He is being asked to go to locations where within a short time he will have reached a point in dollars and cents that his predecessors required years to attain. The men who are making the sacrifice are those giving up their lives on battlefronts or finding themselves serving those casualties of the battle line.

"The procurement and assignment is about to ask that all disqualified doctors consult the chairman when they are found to be ineligible for service. The chairman finds himself in the position where it will become necessary to certify those refusing to consent to allocation to the State Medical Association, which in turn will notify the local county society of the man's refusal.

"Many local societies already are closing their membership for the duration. Thus such a disqualified physician in the status of refusal will find himself in an embarrassing position, especially in the eyes of the public. This public has become sufficiently war conscious to feel that the men of the service come first before any other consideration. We have some two hundred eighty disqualified doctors in Indiana. Obviously many of them have made permanent arrangements, but in the future no such arrangements should be made until the Procurement and Assignment Service has been consulted. The needs of a considerable number of communities *must* be met immediately. Future needs must be anticipated on the basis of what has been outlined about the dropping off of older physicians. There is but one source of replacement, and that is from the ranks of the disqualified physician. Think it over!"

"In time of war when a man deserts his post of duty in military circles, the penalty is death. The nation is at war; communities are component parts of the nation. Efforts on the home front must be integrated with those on the battle fronts.

"In the procurement and assignment of doctors, communities have been reduced to thin proportions. When a doctor picks up and moves from a community where he is needed and moves to one where he is not needed, he not only deserts that community, but, in addition, disturbs the attempted undertaking of maintaining an equitable distribution of doctors. He creates a problem practically impossible of solution — that of finding a replacement.

"In this country Hitlerian methods have not been adopted, but certainly a free agent must assume a moral responsibility by remaining where it was expected he would remain, in lieu of the soldier's bounden duty on the one hand or the death penalty on the other hand. The spirit of unfairness that tends to prevail by the practice of changing locations on the part of doctors is not a commendable one in view of the fact that we have a war to win. Our duty at home is as essential as the duty at the front is vital. The soldier gauges his conduct by no measure of selfishness. We are only civilian soldiers; let us recognize the difference between legal rights and moral rights; let us remain at our post of duty for the duration."

W. A. SELMAN, M.D.

"The League of Nations Monthly Bulletin for December presents tabular data on the expectation of life at birth and at 1 year of age in over thirty countries," *The Journal of the American Medical Association* for March 18 says. "For all countries covered the expectation of life at birth and in the earlier years of life is greater than in previous periods; the improvement is less striking or absent in later stages of life. The United States ranks high in the list and is exceeded only slightly by the Netherlands, New Zealand, Australia and Sweden. Japan, Russia and India have the lowest expectation of life, according to the latest information available. In all countries females show a longer expectation of life than males."

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

APRIL, 1944

**HOSPITALS IN THIRD WAR YEAR
THEME OF NATIONAL
HOSPITAL DAY**

Convinced that the American public is eager to learn more about the functions and problems of community hospitals, Frank J. Walter, president of the American Hospital Association, has indicated that the theme of this year's National Hospital Day, May 12, will illustrate "Hospitals in the Third War Year."

"It is important that the people of this country understand the current problems of their hospitals and that they are made more aware of the services the hospitals perform for them," said Mr. Walter. "The extreme shortage of trained hospital personnel as a handicap to normal performance on behalf of its home community is being overcome by the majority of hospitals. Intensive volunteer and full-time employee recruiting will be of assistance in calling to the attention of the average citizen the ideals of the voluntary hospital and, if volunteer appeals are needed by a sufficient number of people, one of the greatest war difficulties will be partially solved," declared Mr. Walter.

In keeping with the spirit of the times, the Association plans a National Hospital Day emphasis on the continuance of cooperative relations with government agencies, study of postwar hospitalization needs, a continued interest in veterans' physical rehabilitation programs and expanded facilities for an interchange of technical advances in hospital science. "The necessity of careful planning by hospitals and government prior to any radical changes in the hospital system in this country is indicated by the successful development of our American

hospitals through research and mutual co-operation," stated Mr. Walter.

Observance of National Hospital Day affords a consideration of the role hospitals are playing in the war effort of the nation. That the vast Army and Navy recruitment of trained hospital personnel has not resulted in an appreciable decrease of hospital services to the civic population is an indication of the hospitals' determination to overcome any hazard to the national health and welfare. Public cooperation is evidenced in patients' request for minimum hospitalization compatible with physicians' advice. Extra effort and continuous study of changing health needs within each community is a normal function of the hospital administrator, according to officials of the American Hospital Association whose membership is a majority of the voluntary and non-profit hospitals of the country.

"Many people do not realize the constant research and the interchange of ideas essential to advancing hospital science," said Mr. Walter. "Hospitals are presented with administrative and technical problems at all times; the war with accompanying government programs has accentuated the need for alert, well-informed hospital leadership in each community."

Many hospital employees and hospital auxiliary volunteer groups contemplate soliciting pledges from community members to purchase war bonds which will supply medical equipment to the armed forces. "This additional effort is an indication of hospital willingness to assume an even larger share of the nation's responsibility during the war," stated George Bugbee, executive secretary of the American Hospital Association.

Mr. Bugbee estimated that a considerable amount of support of this year's National Hospital Day celebration will be forthcoming from governmental agencies and civic-minded industrial and business leaders.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

OFFICIAL CALL

TO THE OFFICERS FELLOWS AND MEMBERS OF THE
AMERICAN MEDICAL ASSOCIATION:

The ninety-fourth annual session of the American Medical Association will be held in Chicago, Illinois, from Monday, June the twelfth, to Friday, June the sixteenth, Nineteen hundred and forty-four.

The House of Delegates will convene on Monday, June the twelfth.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June the thirteenth, at 8 P.M.

The various sections of the Scientific Assembly will meet Wednesday, June the fourteenth, at 9 A.M. and at 2 P.M. and subsequently according to their respective programs.

JAMES E. PAULLIN, *President*
H. H. SHOULDERS
Speaker, House of Delegates

Attest:

OLIN WEST, *Secretary*

Chicago, Illinois, March the fifteenth

HOUSE OF DELEGATES

The House of Delegates will convene at 10:00 a.m. on Monday, June 12, 1944, in the Red Lacquer Room of the Palmer House, Monroe Street between State Street and Wabash Avenue.

REPRESENTATION

The apportionment of delegates made at the Chicago Session of 1943 entitles your State Association to three delegates for 1944-45-46.

"A member of the House of Delegates must have been a member of the American Medical Association and a Fellow of the Scientific Assembly for at least two years next preceding the session of the House of Delegates at which he is to serve.

"Delegates and alternates from constituent associations shall be elected for two years. Constituent associations entitled to more than one representative shall elect them so that one half, as near as may be, shall be elected each year. Delegates and alternates elected by the sections, or delegates appointed from the United States Army, United States Navy and United States Public Health Service shall hold office for two years."—*Chap. I, Secs. 1 and 2, By-Laws.*

RULES FOR THE GUIDANCE OF THE COMMITTEE ON
CREDENTIALS

Adopted by the House of Delegates at Atlantic City, N. J., June 6, 1912

1. Credentials shall be of two parts. The first part shall be sent to the office of the Secretary of the American Medical Association by the secretary of the constituent association, not later than seven days prior to the first day of the first meeting of the House of Delegates, and shall be a list of delegates and alternates for that association. The constituent associations shall designate an alternate for each delegate, who may take the pledge of the delegate when authorized to do so by said delegate in writing. In the absence of such authority, any

alternate who has been duly chosen by the constituent association may be seated in place of any delegate who is unable to attend, provided he presents proper official authority from said association. A certificate signed by the president or secretary of the constituent association shall be deemed legal authority (*as amended June 7, 1921*).

2. Each delegate shall be furnished with a credential by the secretary of the association by which he is elected upon a prescribed form furnished by the Secretary of the American Medical Association, which shall give the date and term for which he was elected and who was elected to act as alternate for him in case of his inability.

3. A delegate, not presenting himself to the Committee on Credentials, may be seated even though he may not present part 2 of his credential, provided he is properly identified as the delegate who was elected by his association and whose name appears on the Secretary's record.

4. No alternate may be seated unless his credentials meet the same requirements as designated for the delegate and he can show written evidence that he is empowered by his delegate to act for him, except as provided in Section 1 as amended (*as amended June 7, 1921*).

5. When a constituent state association reports that one of its elected delegates and his elected alternate are both unable to attend a specified annual session of the American Medical Association, the constituted authority of said constituent state association may fill the vacancies caused by the absence of both an elected delegate and his elected alternate.

SCIENTIFIC ASSEMBLY

The Opening General Meeting, which constitutes the opening exercises of the Scientific Assembly of the Association, will be held Tuesday evening, June 13, 1944, at 8:00. The Sections will meet on Wednesday, Thursday and Friday, June 14, 15 and 16.

Convening at 9:00 a.m., the Sections on

Practice of Medicine.

Obstetrics and Gynecology.

Laryngology, Otology and Rhinology.

Pathology and Physiology.

Orthopedic Surgery.

Urology.

Preventive and Industrial Medicine and Public Health.

Anesthesiology.

Miscellaneous Topics:

Sessions for the General Practitioner.

Convening at 2:00 p.m., the Sections on

Surgery, General and Abdominal.

Ophthalmology.

Pediatrics.

Experimental Medicine and Therapeutics.

Nervous and Mental Diseases.

Dermatology and Syphilology.

Gastro-Enterology and Proctology.

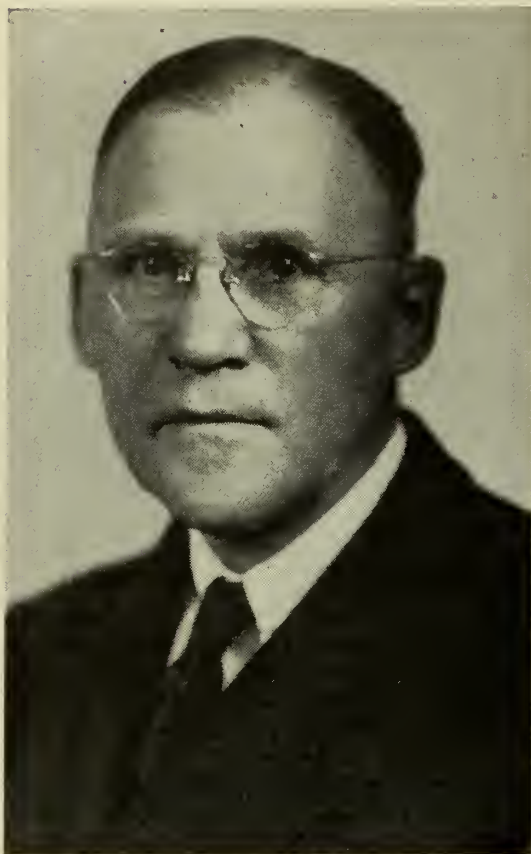
Radiology.

REGISTRATION DEPARTMENT

The Registration Department will be open from 8:30 a.m. until 5:30 p.m. on Monday, Tuesday, Wednesday and Thursday, June 12, 13, 14 and 15, and from 8:30 a.m. to 12:00 noon on Friday, June 16, 1944.

OFFICERS OF THE MEDICAL ASSOCIATION OF GEORGIA

1943 - 1944



WILLIAM ARTHUR SELMAN, M.D.
Atlanta
President, 1943-44



CLEVELAND THOMPSON, M.D., Millen
President-Elect, 1943-44
Councillor, First District



Major Fowler, M.D.
Atlanta
First Vice-President



C. Hall Farmer, M.D.
Macon
Second Vice-President



Edgar Shanks, M.D., Atlanta
Secretary-Treasurer and
Editor of The Journal



John W. Simmons, M.D.
Brunswick, Parliamentarian

The officers of the Medical Association of Georgia urge its members to attend the Ninety-Fifth Annual Session to be held at Hotel DeSoto, Savannah, May 9-12, 1944.

The House of Delegates will convene Tuesday, May 9, at 2:00 P.M. at Hotel DeSoto. The scientific session will open May 10 at 8:30 A.M.

CAT.

CAT.

CAT.

CAT.



Wm. A. Mulherin, M.D.
Augusta
Delegate to the A.M.A.



Allen H. Bunce, M.D.,
Atlanta
Delegate to the A.M.A.



Olin H. Weaver, M.D.,
Macon
Delegate to the A.M.A.



Benj. H. Minchew, M.D.,
Waycross
Alternate Delegate to the A.M.A.

CAT.

CAT.

CAT.

CAT.



H. Clifford Sauls, M.D.,
Atlanta
Alternate Delegate to the A.M.A.



C. K. Sharp, M.D.,
Arlington
Alternate Delegate to the A.M.A.



C. K. Wall, M.D.,
Thomasville
Councilor, Second District



Steve P. Kenyon, M.D.,
Dawson
Councilor, Third District

CAT.

CAT.

CAT.

CAT.



Kenneth S. Hunt, M.D.
Griffin
Councilor, Fourth District



Marion C. Pruitt, M.D.,
Atlanta
Councilor, Fifth District



H. D. Allen, Jr., M.D.
Milledgeville
Councilor, Sixth District



Wm. H. Perkinson, M.D.
Marietta
Councilor, Seventh District



Wm. F. Reavis, M.D.,
Waycross
Councilor, Eighth District



C. B. Lord, M.D.,
Jefferson
Councilor, Ninth District



H. L. Cheves, M.D.,
Union Point
Councilor, Tenth District



R. V. Martin, M.D.,
Savannah
Vice-Councilor, First District



Chas. H. Watt, M.D.,
Thomasville
Vice-Councilor, Second District



Guy J. Dillard, M.D.,
Columbus
Vice-Councilor, Third District



Enoch Callaway, M.D.,
LaGrange
Vice-Councilor, Fourth District



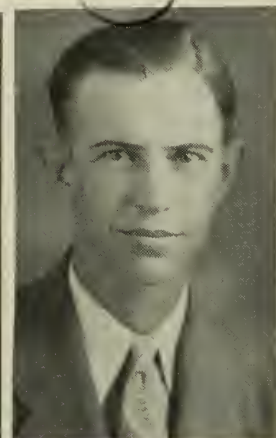
Spencer A. Kirkland, M.D.,
Atlanta
Vice-Councilor, Fifth District



H. G. Weaver, M.D.,
Macon
Vice-Councilor, Sixth District



D. Lloyd Wood, M.D.,
Dalton
Vice-Councilor, Seventh District



Alton M. Johnson, M.D.,
Valdosta
Vice-Councilor, Eighth District



D. H. Garrison, M.D.,
Clarkeville
Vice-Councilor, Ninth District



J. Victor Roule, M.D.,
Augusta
Vice-Councilor, Tenth District



H. L. Rowe, Social Circle
Executive Secretary and Business Manager The Journal

MEDICAL ASSOCIATION OF GEORGIA

Ninety-Fifth Annual Session

Savannah

May 9, 10, 11, 12, 1944

OFFICERS AND COMMITTEES, 1943-1944

Officers

President.....	W. A. Selman, Atlanta
President-Elect.....	Cleveland Thompson, Millen
First Vice-President.....	Major Fowler, Atlanta
Second Vice-President.....	C. Hall Farmer, Macon
Parliamentarian.....	John W. Simmons, Brunswick
Secretary-Treasurer.....	Edgar D. Shanks, Atlanta

Delegates to A. M. A.

Wm. A. Mulherin (1943-44).....	Augusta
Alternate, B. H. Minchew.....	Waycross
Allen H. Bunce (1943-44).....	Atlanta
Alternate, H. C. Sauls.....	Atlanta
Olin H. Weaver (1944-45).....	Macon
Alternate, C. K. Sharp.....	Arlington

Council

Steve P. Kenyon, Clerk.....	Dawson
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Councilors

1. C. Thompson (1945).....	Millen
2. C. K. Wall (1945).....	Thomasville
3. Steve P. Kenyon (1945).....	Dawson
4. Kenneth S. Hunt (1945).....	Griffin
5. Marion C. Pruitt (1946).....	Atlanta
6. H. D. Allen, Jr. (1946).....	Milledgeville
7. W. H. Perkinson (1946).....	Marietta
8. W. F. Reavis (1946).....	Waycross
9. C. B. Lord (1944).....	Jefferson
10. Harry L. Cheves (1944).....	Union Point

Vice-Councilors

1. R. V. Martin (1945).....	Savannah
2. C. H. Watt (1945).....	Thomasville
3. Guy J. Dillard (1945).....	Columbus
4. Enoch Callaway (1945).....	LaGrange
5. S. A. Kirkland (1946).....	Atlanta
6. H. G. Weaver (1946).....	Macon
7. D. Lloyd Wood (1946).....	Dalton

8. Alton M. Johnson (1946).....	Valdosta
9. D. H. Garrison (1944).....	Clarksville
10. J. Victor Roule (1944).....	Augusta

HONORARY ADVISORY BOARD

of the

MEDICAL ASSOCIATION OF GEORGIA

W. S. Goldsmith.....	President, 1915-1916
E. E. Murphey.....	President, 1917-1918
J. W. Palmer.....	President, 1918-1919
J. W. Daniel.....	President, 1923-1924
F. K. Boland.....	President, 1925-1926
W. A. Mulherin.....	President, 1927-1928
C. K. Sharp.....	President, 1928-1929
Wm R. Dancy.....	President, 1929-1930
M. M. Head.....	President, 1932-1933
C. H. Richardson.....	President, 1933-1934
Clarence L. Ayers.....	President, 1934-1935
James E. Paullin.....	President, 1935-1936
B. H. Minchew.....	President, 1936-1937
Grady N. Coker.....	President, 1938-1939
J. C. Patterson.....	President, 1940-1941
Allen H. Bunce.....	President, 1941-1942
James A. Redfearn.....	President, 1942-1943

GEORGIA MEDICAL SOCIETY

(Chatham County)

OFFICERS AND COMMITTEES

Officers

President.....	E. J. Whelan, Savannah
President-Elect.....	G. L. Touchton, Savannah
Vice-President.....	W. V. Long, Savannah
Secretary-Treasurer.....	S. Elliott Wilson, Savannah
Delegate.....	Ruskin King, Savannah
Delegate.....	J. L. Elliott, Savannah
Alternate Delegate.....	J. W. Daniel, Jr., Savannah
Alternate Delegate.....	H. T. Exley, Savannah

COMMITTEES

All of Savannah

Wm. R. Dancy, General Chairman

Committee on Arrangements

A. J. Kelley, Chairman	R. V. Martin
J. Reid Broderick	Lee Howard
Elliott Wilson	Walter Wilson
W. B. Crawford	Emerson Ham

Entertainment and Banquet

Ruskin King Chairman

E. C. Demmond	Howard Exley
J. K. Train	E. T. Upson
H. T. Compton	Hugo Johnson

Reception

George Touchton, Chairman

G. T. Faggart	J. W. Daniel, Sr.
J. O. Baker	Jabez Jones
John Howkins	C. G. Redmond
R. L. Neville	W. D. Wilson

Transportation

R. L. Oliver, Chairman

H. F. Sharpley, Jr.	Rufus Graham
Everett Iseman	Henry Levington
D. B. Edwards	W. V. Long
E. S. Osborne	H. C. Frech

Sports

C. F. Holton, Chairman

Harry Righton	L. W. Williams
St. Julian deCaradeuc	Pat Smith
J. F. Chisholm	Walter Norton

Finance

Elliott Wilson, Chairman	G. H. Lang
Robert Drane	Lawrence Lee
Antonio Waring	John Elliott

Publicity

Edward J. Whelan, Chairman	J. O. O'Neill
John Daniel, Jr.	W. A. Cole

Alumni Dinners

University of Georgia School of Medicine

Charles Usher, Chairman

C. R. A. Redmond	E. N. Gleaton
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Emory University School of Medicine

L. W. Shaw, Chairman

E. N. Maner	G. T. Olmstead
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MEDICAL ASSOCIATION OF GEORGIA

COMMITTEES

Executive Committee

W. A. Selman, President	Atlanta
Edgar D. Shanks, Secretary-Treasurer	Atlanta

Scientific Work

Mark S. Dougherty, Jr., Chairman (1944)	Atlanta
B. H. Minchew (1945)	Waycross
Ralph H. Chaney (1946)	Augusta
Edgar D. Shanks, Secretary-Treasurer	Atlanta

Public Policy and Legislation

Spencer A. Kirkland, Chairman (1944)	Atlanta
Edgar H. Greene (1946)	Atlanta
J. L. Campbell (1945)	Atlanta
Edgar D. Shanks, Secretary-Treasurer	Atlanta
T. F. Abercrombie, Director, State Department of Public Health	Atlanta

Medical Defense

Marion C. Pruitt, Chairman (1948)	Atlanta
B. H. Minchew (1944)	Waycross
A. R. Rozar (1945)	Macon
Edgar D. Shanks, Secretary-Treasurer	Atlanta

ADVISORY

State Board of Health

Edgar H. Greene, Chairman	Atlanta
John B. Fitts	Atlanta
H. G. Weaver	Macon
D. H. Garrison	Clarksville
Marcus Mashburn	Cumming
J. M. Barnett	Albany
J. C. Brim	Pelham
C. S. Pittman	Tifton
C. L. Ayers	Toccoa
W. G. Elliott	Cuthbert
C. W. Roberts	Atlanta

Hospitals

D. Henry Poer, Chairman (1948)	Atlanta
R. H. Oppenheimer, Acting Chairman (1947)	Atlanta
Cleveland Thompson (1944)	Millen

L. P. Holmes (1945)	Augusta
A. D. Little (1946)	Thomasville

Revision of Pharmacopeia of U. S.

C. C. Aven, Chairman (1949)	Atlanta
Allen H. Bunce (1949)	Atlanta
Hal M. Davison (1949)	Atlanta

Abner Wellborn Calhoun Lectureship

James E. Paullin, Chairman (1948)	Atlanta
J. R. Broderick (1944)	Savannah
Eugene E. Murphey (1945)	Augusta
W. P. Harbin, Jr. (1946)	Rome
Frank K. Boland (1947)	Atlanta

Medical Economics

B. T. Beasley, Chairman	Atlanta
Vernon Powell	Atlanta
Major Fowler	Atlanta
Grady N. Coker	Canton
D. C. Kelley	Lawrenceville
T. J. Busey	Fayetteville
J. C. Keaton	Albany
C. W. Roberts	Atlanta

Memorial Exercises

A. J. Mooney, Chairman	Statesboro
W. A. Mulherin	Augusta
J. C. Patterson	Cuthbert
Grady N. Coker	Canton
Frank K. Boland	Atlanta
N. R. Thomas	Albany
J. E. Powell	Villa Rica

*Medical History of Georgia**Sub-Committee*

Frank K. Boland, Chairman	Atlanta
Joseph Krafka	Augusta
Chas. C. Harrold	Macon
Olin H. Weaver	Macon
J. Calvin Weaver	Atlanta
Eugene E. Murphey	Augusta

Cancer Commission

J. L. Campbell, Chairman	Atlanta
Lee Howard	Savannah
A. J. Mooney, Sr.	Statesboro
A. D. Little	Thomasville
R. F. Wheat	Bainbridge
R. C. Pendergrass	Americus
W. F. Jenkins	Columbus
Kenneth Hunt	Griffin
Enoch Callaway	LaGrange
E. L. Bishop	Atlanta
J. J. Clark	Atlanta
C. C. Harrold	Macon
N. J. Newsom	Sandersville
David L. Wood	Dalton
W. F. Reavis	Waycross
S. T. R. Revell	Louisville
H. M. McKemie	Albany
Hartwell Joiner	Gainesville
W. H. Roberts	Augusta
H. E. Talmadge	Athens
A. H. Hilsman	Albany

*Executive Committee, Women's Field Army of the
American Society for the Control of Cancer*

J. L. Campbell, Chairman.....	Atlanta
E. L. Bishop.....	Atlanta
J. J. Clark.....	Atlanta
Robert C. Pendergrass.....	Americus
Enoch Callaway	LaGrange
C. C. Harrold.....	Macon
T. F. Abercrombie.....	Atlanta
J. V. Rogers.....	Cairo

Orthopedics

Fred G. Hodgson, Chairman.....	Atlanta
T. P. Goodwyn.....	Atlanta
H. M. Michel.....	Augusta
F. Bert Brown.....	Savannah
J. Hiram Kite.....	Atlanta
L. H. Muse.....	Atlanta
C. H. Watt.....	Thomasville
F. K. Neill.....	Albany

Ophthalmology

Grady E. Clay, Chairman.....	Atlanta
S. J. Lewis.....	Augusta
E. N. Maner.....	Savannah
Francis B. Blackmar.....	Columbus
H. M. Moore.....	Thomasville
J. R. Childs.....	Atlanta
Herschel C. Crawford.....	Atlanta
I. W. Irvin.....	Albany

Syphilis

Harold P. McDonald, Chairman.....	Atlanta
J. T. McCall.....	Rome
Roy R. Kracke.....	Emory University
J. Z. McDaniel.....	Augusta
Willis P. Jordan.....	Columbus
Wallace Bazemore	Macon
John C. Keaton.....	Albany
Harry Righton	Savannah
R. F. Wheat.....	Bainbridge
L. W. Pierce.....	Waycross
Hartwell Joiner	Gainesville
R. H. McDonald.....	Newnan
P. L. Hilsman.....	Albany

Industrial Health

Jno. W. Simmons, Chairman.....	Brunswick
Thos. P. Goodwyn.....	Atlanta
B. H. Minchew.....	Waycross
C. W. Roberts.....	Atlanta
L. M. Petrie.....	Atlanta
C. F. Holton.....	Savannah
W. W. Battey.....	Augusta
W. W. Chrisman.....	Macon
A. N. Dykes.....	Columbus
J. P. Tye.....	Albany
R. E. Newberry.....	Atlanta

Clinical Pathology

A. J. Ayers, Chairman.....	Atlanta
Roy R. Kracke.....	Emory University

Walter W. Daniel.....	Atlanta
A. R. Rozar.....	Macon
D. R. Venable.....	Columbus
R. Lee Rogers.....	Gainesville
Alex R. Freeman.....	Albany

ADVISORY

Student Loan Fund

Mrs. H. G. Banister, Chairman.....	Ila
G. Lombard Kelly.....	Augusta
R. H. Oppenheimer.....	Atlanta

Tuberculosis

C. C. Aven, Chairman.....	Atlanta
Champneys H. Holmes.....	Atlanta
Enoch Callaway	LaGrange
H. C. Schenck.....	Atlanta
C. D. Whelchel.....	Gainesville
W. C. Cook.....	Columbus
R. C. McGahee.....	Augusta
E. F. Wahl.....	Thomasville
R. V. Martin.....	Savannah
C. M. Sharp.....	Alto
H. C. Atkinson.....	Macon
Warren Gilbert	Rome

Scientific Exhibit

W. F. Hamilton, Chairman.....	Augusta
Jos. C. Massee, Co-Chairman.....	Atlanta
J. E. Scarborough, Co-Chairman.....	Emory University
Robert Drane	Savannah
Lee Howard	Savannah
B. E. Collins.....	Waycross
Joseph Yampolsky	Atlanta
Wm. F. Lake.....	Atlanta
Edgar R. Pund.....	Augusta
John E. Walker.....	Columbus
Helen W. Bellhouse.....	Thomasville
R. N. Johnson.....	Rome
W. S. Cook.....	Albany
J. H. Kite.....	Atlanta

ADVISORY

Woman's Auxiliary

Jas. N. Brawner, Chairman.....	Atlanta
Eustace A. Allen.....	Atlanta
C. D. Bowdoin.....	Atlanta
Olin S. Weaver.....	Macon
A. S. Bacon.....	Albany
J. Lon King.....	Macon

Medical Preparedness

W. A. Selman, Chairman.....	Atlanta
Jno. B. Fitts.....	Atlanta
Edgar D. Shanks, Secretary-Treasurer.....	Atlanta

Post-Graduate Study

G. Lombard Kelly, Chairman.....	Augusta
Russell H. Oppenheimer.....	Emory University
Richard Torpin	Augusta
Olin S. Cofer.....	Atlanta
H. C. Sauls.....	Atlanta
W. F. Reavis.....	Waycross

S. P. Kenyon.....	Dawson
R. D. McKenzie.....	Albany

*Liaison Committee**Georgia State Medical Association (Negro)*

M. T. Harrison, Chairman.....	Atlanta
W. E. Storey.....	Columbus
R. C. Maddox.....	Rome
J. F. Hanson.....	Macon
H. H. Allen.....	Decatur

Pediatrics

W. W. Anderson, Chairman.....	Atlanta
A. J. Waring.....	Savannah
Frank Schley.....	Columbus
M. M. McCord.....	Rome

Appendicitis

T. C. Davison, Chairman.....	Atlanta
J. K. Quattlebaum.....	Savannah
Charley K. Wall.....	Thomasville
J. C. Patterson.....	Cuthbert
Fred F. Rudder.....	Atlanta
F. B. Rawlings.....	Sandersville
B. Lester Harbin.....	Rome
Kenneth McCullough.....	Waycross
R. L. Rogers.....	Gainesville
S. D. Brown.....	Royston
Enoch Callaway.....	LaGrange
W. M. Feild.....	Albany
S. E. Sanchez.....	Barwick

Awards

Wm. R. Dancy, Chairman.....	Savannah
T. S. Gatewood.....	Americus
Mather M. McCord.....	Rome
Ralph H. Chaney.....	Augusta
W. F. Reavis.....	Waycross
T. C. Williams.....	Valdosta

Maternal Mortality and Infant Deaths

H. F. Sharpley, Jr., Chairman.....	Savannah
C. B. Upshaw.....	Atlanta
Richard Torpin.....	Augusta
I. M. Lucas.....	Albany
David M. Wolfe.....	Atlanta

FRATERNAL DELEGATES TO OTHER STATE MEETINGS

Alabama: D. S. Reese, Carrollton; Mercer Blanchard, Columbus.
Florida: W. W. Anderson, Atlanta; Grady N. Coker, Canton, and Hal. M. Davison, Atlanta.
North Carolina: Allen H. Bunce, Atlanta, and Ralph M. Goss, Athens.
South Carolina: G. Lombard Kelly, Augusta, and Stewart D. Brown, Royston.
Tennessee: J. T. McCall, Rome.

STATE BOARD OF HEALTH*

First District: J. C. Metts, Savannah, Sept. 1, 1945.
Second District: C. K. Sharp, Arlington, Sept. 1, 1945.
Third District: Mr. R. C. Ellis, Americus, Sept. 1, 1948.
Fourth District: J. A. Corry, Barnesville, Sept. 1, 1943.
Fifth District: Mr. Robt. F. Maddox, Atlanta, Sept. 1, 1948.
Sixth District: C. L. Ridley, Macon, Sept. 1, 1944.
Seventh District: W. P. Harbin, Jr., Rome, Sept. 1, 1944.

Eighth District: Henry W. Clements, Adel, Sept. 1, 1944.
Ninth District: Robt. L. Rogers, Gainesville, Sept. 1, 1945.

Tenth District: D. N. Thompson, Elberton, Sept. 1, 1948.
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*State of Georgia at Large**Georgia Dental Association†*

W. K. White, Savannah, Sept. 1, 1945.
J. G. Williams, Atlanta, Sept. 1, 1945.

Georgia Pharmaceutical Association†

M. D. Hodges, Marietta, Sept. 1, 1941.
John W. White, Thomasville, Sept. 1, 1947.

*Nominated by their respective district medical societies and appointed for six year terms.

†Nominated by their respective associations.

STATE BOARD OF MEDICAL EXAMINERS

L. G. Neal.....	Cleveland
J. I. Matthews.....	Dallas
R. F. Wheat.....	Bainbridge
Murdock Eguen.....	Atlanta
Steve P. Kenyon.....	Dawson
Harold P. McDonald.....	Atlanta
J. W. Palmer.....	Ailey
T. H. Clark.....	Douglas
Rufus A. Askew.....	Atlanta
Grady N. Coker.....	Canton

DELEGATES TO THE 1944 SESSION

COUNTIES	NAMES AND ADDRESSES
Appling.....	
Baldwin.....	C. B. Fulghum, Milledgeville
Bartow.....	W. E. Wofford, Cartersville
Ben Hill.....	
Bibb.....	J. A. Fountain, Macon
	A. M. Phillips, Macon
Blue Ridge.....	C. B. Crawford, Blue Ridge
Brooks.....	
Bulloch-Candler-Evans.....	
Burke.....	W. R. Lowe, Midville
Carroll.....	S. F. Scales, Carrollton
Chatham—	
Georgia Medical Society.....	Ruskin King, Savannah
	J. L. Elliott, Savannah
Chattooga.....	
Cherokee-Pickens.....	Grady N. Coker, Canton
Clarke-Madison-Oconee.....	
Clayton-Fayette.....	
Cobb.....	R. W. Fowler, Marietta
Coffee.....	
Colquitt.....	J. B. Woodall, Moultrie
Coweta.....	
Crisp.....	
Decatur-Seminole.....	R. F. Wheat, Bainbridge
DeKalb.....	
Dooley.....	
Dougherty.....	P. E. Roberson, Albany
Douglas.....	
Elbert.....	D. N. Thompson, Elberton
Emanuel.....	J. H. Chandler, Swainsboro
Floyd.....	Harry Dawson, Shannon
Forsyth.....	Marcus Mashburn, Cumming
Franklin.....	

Fulton..... Ben H. Clifton, Atlanta
 Joseph C. Massee, Atlanta
 W. W. Anderson, Atlanta
 T. F. Davenport, Atlanta
 Don F. Cathcart, Atlanta
 Eustace A. Allen, Atlanta
 Geo. A. Williams, Atlanta
 John W. Turner, Atlanta
 L. Harvey Hamff, Atlanta

Glynn.....
 Gordon..... W. D. Hall, Calhoun
 Grady.....
 Greene..... W. R. Richards, Greensboro
 Gwinnett..... D. C. Kelley, Lawrenceville
 Habersham.....
 Hall..... Cleveland Whelchel, Gainesville
 Hancock..... C. S. Jernigan, Sparta
 Haralson..... O. D. King, Bremen
 Hart..... J. I. Jenkins, Bowman
 Henry..... R. V. Brandon, McDonough
 Houston-Peach.....
 Jackson-Barrow..... W. T. Randolph, Winder
 Jasper.....
 Jefferson..... John J. Pilcher, Wrens
 Jenkins..... Henry G. Lee, Millen
 Henry..... R. V. Brandon, McDonough
 Lamar..... J. A. Corry, Barnesville
 Laurens..... C. G. Hodges, Dublin
 Macon..... Thos. M. Adams, Montezuma
 McDuffie..... B. F. Riley, Jr., Thomson
 Meriwether.....
 Mitchell..... J. C. Brim, Pelham
 Monroe.....
 Montgomery..... H. C. Sharpe, Alston
 Morgan..... J. L. Porter, Rutledge
 Muscogee..... W. R. Jones, Columbus
 Newton..... S. L. Waites, Covington
 Ocmulgee: Bleckley-Dodge-Pulaski.....
 Polk..... W. H. Lucas, Cedartown
 Rabun..... J. A. Green, Clayton
 Randolph..... W. G. Elliott, Cuthbert
 Richmond.....
 Rockdale.....
 Screven..... W. H. Bennett, Sylvester
 South Georgia Medical Society: Berrien-Clinch-
 Cook-Echols-Lanier-Lowndes.....
 Spalding..... G. L. Walker, Griffin
 Stephens..... C. J. Sapp, Toccoa
 Sumter.....
 Tattnall..... L. V. Strickland, Cobbtown
 Taylor..... R. C. Montgomery, Butler
 Telfair..... S. T. Parkerson, McRae
 Thomas.....
 Tift..... C. S. Pittman, Tifton
 Toombs.....
 Tri Society: Calhoun-
 Early-Miller..... W. H. Hall, Blakely
 Tri Society:
 Liberty-Long-McIntosh.....
 Troup..... S. C. Rutland, LaGrange
 Turner.....
 Upson.....
 Walker-Catoosa-Dade..... Fred H. Simonton, Chickamauga

Walton..... Chas. S. Floyd, Loganville
 Ware.....
 Warren..... H. B. Cason, Warrenton
 Washington..... E. G. Newsome, Sandersville
 Wayne..... J. T. Colvin, Jesup
 Whitfield.....
 Wilcox..... J. D. Owens, Rochelle
 Wilkes.....
 Worth.....

DISTRICT SOCIETIES OFFICERS AND MEETING DATES

First District

President—J. M. Byne, Jr., Waynesboro
 Secretary—Wm. D. Wilson, Savannah
 Third Wednesdays—March and July

Second District

President—C. S. Pittman, Tifton
 Secretary—J. C. Brim, Pelham
 Second Thursdays—April and October

Third District

President—R. C. Pendergrass, Americus
 Secretary—W. P. Jordan, Columbus
 Third Wednesday in June—Second Wednesday in November

Fourth District

President—J. H. Jackson, Barnesville
 Secretary—M. M. Head, Zebulon
 Second Wednesdays—February and August

Fifth District

President—Jeff L. Richardson, Atlanta
 Secretary—Geo. A. Williams, Atlanta
 No set dates

Sixth District

President—C. S. Jernigan, Sparta
 Secretary—A. M. Phillips, Macon
 Last Wednesday in June—first Wednesday in December

Seventh District

President—W. H. Hall, Calhoun
 Secretary—W. C. Mitchell, Smyrna
 First Wednesday in April—last Wednesday in September

Eighth District

President—G. E. Atwood, Waycross
 Secretary—G. T. Crozier, Valdosta
 Second Tuesdays—April and October

Ninth District

President—E. F. Chaffin, Toccoa
 Secretary—Pratt Cheek, Gainesville
 Third Wednesdays—March and September
 (No meetings for the duration)

Tenth District

President—D. N. Thompson, Elberton
 Secretary—W. D. Gholston, Danielsville
 Second Wednesdays—February and August

ANNOUNCEMENTS

Meetings will be held in the Hotel DeSoto.

Be sure to go to the Registration Desk immediately after your arrival, present your 1944 membership card, register and procure a badge and program.

Discussion of papers is open to all members and guests of the Association; it is not limited to those named on the program.

On arising to discuss a paper the speaker will please announce his name and address clearly for the benefit of the Association and the reporter.

Meetings will be called to order at the hour fixed on the program. It is especially desired that the members be prompt in their attendance.

All manuscript should be typewritten, double spaced, and on one side of the paper only. Papers must be handed to the Secretary immediately after being read.

IMPORTANT NOTICE

Delegates must present written credentials to the Committee on Credentials from the House of Delegates to secure delegates' badges.

Members may not take part in the proceedings until they have registered and procured official badges.

PUBLIC MEETINGS

Eastern War Time

Hotel DeSoto, Savannah

WEDNESDAY, MAY 10, 8:30 A.M.

Opening Meeting

WEDNESDAY, MAY 10, 8:00 P.M.

Presentation of the President's Gold Key to President William Arthur Selman, Atlanta, by Clarence L. Ayers, Toccoa.

THURSDAY, MAY 11, 12:00 NOON

President's Address

William Arthur Selman, Atlanta

The President's Address will be at an open session to which the public and visitors are invited.

MEMORIAL EXERCISES

A. J. Mooney, Statesboro

Chairman, Committee on Necrology

ENTERTAINMENTS

WEDNESDAY, MAY 10, 1:00 P.M.

Hotel DeSoto

Annual luncheon of the Eye, Ear, Nose and Throat Society.

WEDNESDAY, MAY 10, 6:30 P.M.

Hotel DeSoto

Annual dinner of the alumni of Emory University School of Medicine. L. W. Shaw, Chairman.

Annual dinner of the alumni of University of Georgia School of Medicine. Charles Usher, Chairman.

THURSDAY, MAY 11, 12:30 P.M.

Hotel DeSoto

Annual Luncheon of the Georgia Pediatric Society.

Meeting of the Fellows of the American Academy of Pediatrics will follow immediately.

THURSDAY, MAY 11, 1:30 P.M.

Hotel DeSoto

Annual luncheon of the Georgia Roentgenological Society.

THURSDAY, MAY 11, 8:00 P.M.

Hotel DeSoto

Annual banquet of the Medical Association of Georgia.

Dance

MEETING OF THE HOUSE OF DELEGATES

Hotel DeSoto

TUESDAY, MAY 9, 2:00 P.M.

Eastern War Time

First meeting of the House of Delegates

1. Call to order by the President
2. Roll Call
3. Appointment of Reference Committees
4. Reports of officers:
 - President
 - President-Elect
 - Vice-Presidents
 - Parliamentarian
 - Secretary-Treasurer: Financial report
 - Reports of Delegates to the A.M.A.
5. Reports of committees:
 - Scientific Work
 - Public Policy and Legislation
 - Arrangements
 - Medical Defense
 - Hospitals
 - Necrology
 - Cancer Commission
 - History
 - Abner Wellborn Calhoun Lectureship
 - Awards
 - Advisory—State Board of Health
 - Advisory—Woman's Auxiliary
 - Medical Economics
 - Orthopedics—Advisory, State Department of Public Welfare
 - Ophthalmology—Advisory, State Department of Public Welfare
 - Syphilis
 - Tuberculosis
 - Special Committees
6. Unfinished business
7. New business

TUESDAY, MAY 9, 8:00 P.M.

Eastern War Time

Hotel DeSoto

Second Meeting of the House of Delegates

1. Call to order by the President
2. Reading of minutes
3. Announcements
4. Report of President of Woman's Auxiliary
5. Reports of committees continued
6. Reports of Fraternal Delegates
7. Unfinished business
8. New business

FRIDAY, MAY 12, 8:00 A.M.

Eastern War Time

Hotel DeSoto

Third Meeting of the House of Delegates

1. Call to order by the President
2. Reading of minutes
3. Reports of committees
4. Unfinished business
5. New business

OFFICIAL REPORTER

Miss Winifred H. McLean.....Gastonia, N. C.

MEETING OF THE COUNCIL

TUESDAY, MAY 9, 5:00 P.M.

Eastern War Time

Hotel DeSoto

The first meeting of the Council will be held in the Hotel DeSoto, Tuesday, May 9, following the afternoon session of the House of Delegates. Each Councilor will render a report of conditions of each county of his district. Other meetings of the Council will be held on the call of the chairman.

SCIENTIFIC PROGRAM

WEDNESDAY, MAY 10, 8:30 A.M.

Eastern War Time

Hotel DeSoto

The papers for each meeting *must* be read as scheduled on the program.

Call to order by the President, William Arthur Selman, Atlanta.

Invocation

Wm. R. Dancy, Savannah

Address of Welcome

Edward J. Whelan, Savannah
President, Georgia Medical Society

Response to Address of Welcome

Ralph H. Chaney, Augusta

WEDNESDAY, MAY 10, 8:30 A.M.

Eastern War Time

Hotel DeSoto

SCIENTIFIC PROGRAM

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 15 minutes.

1. Placenta Previa: Report of 170 Cases.
John Persall, Augusta.
Richard Torpin, Augusta.
2. The Treatment of Chemoresistant Gonorrhea in the Female With Penicillin.
Robert Greenblatt, Augusta.
3. Conservative Surgery in the Treatment of Uterine Displacement.
Edgar H. Greene, Atlanta.
4. Changing An Old Southern Custom.
Edwin R. Watson, Atlanta.
To lead the discussion of papers 1, 2, 3 and 4:
J. C. Dover, Clayton.
Sylvester Cain, Norcross.
5. Psychoanalysis: Christ versus Freud.
Elton S. Osborne, Savannah.
6. Medical Diagnostic Signs.
J. K. Fancher, Atlanta.
7. The Management of the Obese Diabetic.
L. Harvey Hamff, Atlanta.
8. Hypoglycemia Following Protamine-Zinc Insulin Therapy.
George L. Walker, Griffin.
9. Anterior Chest Pain: Differential Diagnosis.
E. A. Bancker, Atlanta.

To lead the discussion of papers 5, 6, 7, 8 and 9:

J. Reid Broderick, Savannah.

Ernest Wahl, Thomasville.

WEDNESDAY, MAY 10, 12:00 NOON

Eastern War Time

Hotel DeSoto

ABNER WELLBORN CALHOUN LECTURE

Gastric and Duodenal Ulcers

Arthur Wilburn Allen, Boston

Introduction by Frank K. Boland, Atlanta

WEDNESDAY, MAY 10, 2:15 P.M.

Eastern War Time

Hotel DeSoto

All papers and presentations for this meeting contributed under the auspices of The War-Time Graduate Medical Meetings — Edwin L. Bortz, Philadelphia, chairman; Glenville Giddings, Atlanta, committeeman representing the State of Georgia.

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 15 minutes.

1. Low Back and Sciatic Pain: Neurologic Point of View.
Edgar F. Fincher, Atlanta.
2. Low Back Pain and Disability: Orthopedic Point of View.
Fred G. Hodgson, Atlanta.
3. Shock.
Arthur J. Merrill, Atlanta.
4. Diagnosis and Treatment of Bleeding Diseases.
Roy R. Kracke, Decatur.
5. Relief from Pain.
W. A. Risteen, Augusta.
6. Sarcoidosis: Review of Literature and Report of Case.
Carter Smith, Atlanta.
H. C. Sauls, Atlanta.
7. Surgical Management of Achalasia of the Esophagus: Reports of Cases.
Lon W. Grove, Atlanta.
8. Malaria.
Loren D. Moore, Fort McPherson.
9. Leather Bottle Stomach.
Frank K. Boland, Atlanta.

WEDNESDAY, MAY 10, 8:00 P.M.

Eastern War Time

Hotel DeSoto

Presentation of the President's Gold Key to the President, William Arthur Selman, Atlanta, by C. L. Ayers, Toccoa.

The Council on Medical Service and Public Relations of the American Medical Association

G. Lombard Kelly, Augusta and Chicago

Georgia's Postwar Public Health Program

T. F. Abercrombie, Atlanta

Director, Georgia Department of Public Health

THURSDAY, MAY 11, 8:30 A.M.

Eastern War Time

Hotel DeSoto

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 15 minutes.

1. The Use of Bone Graft in Orthopedic Surgery.
H. Tayloe Compton, Savannah.
2. The Choice and Proper Use of Intravenous Fluids.
Thomas Harrold, Macon.
3. Combined Surgical and Injection Treatment of Varicose Veins: Report of 500 Cases.
Charles E. Rushin, Atlanta.
4. Prevention of Pulmonary Embolism by Ligation of the Veins of the Lower Extremities.
J. Gaston Gay, Atlanta.
W. H. Proctor, Atlanta.
5. Common Duct Stone.
Ben Hill Clifton, Atlanta.
6. Treatment of Cancer of the Breast.
J. L. Campbell, Atlanta.
7. Granuloma Inguinale: Study of 200 Cases.
Gordon C. Allison, Atlanta.
8. Penicillin in Acute and Chronic Infections.
Albert L. Evans, Atlanta.
9. Glaucoma: Its Diagnosis and Management.
W. O. Martin, Atlanta.
To lead the discussion:
O. H. Weaver, Macon.
S. J. Lewis, Augusta.

THURSDAY, MAY 11, 12:00 NOON

Eastern War Time

Hotel DeSoto

President's Address

William Arthur Selman, Atlanta

Memorial Exercises

A. J. Mooney, Statesboro
Chairman, Committee on Necrology

THURSDAY, MAY 11, 2:15 P.M.

Eastern War Time

Hotel DeSoto

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 15 minutes.

1. Recent Advances in the Treatment of Respiratory Infections in Infants and Children.
W. W. Anderson, Atlanta.
2. Problems in the Treatment of Rheumatic Heart Disease in Children.
Joseph Yampolsky, Atlanta.
To lead the discussion of papers 1 and 2:
Ruskin King, Savannah.
C. M. Burpee, Augusta.
3. Angina Pectoris.
Jeff L. Richardson, Atlanta.
4. The Use of Lanacitide-C in the Treatment of Acute Heart Failure.
E. Van Buren, Atlanta.
5. Coronary Heart Disease: Diagnosis and Treatment.
John W. Brittingham, Augusta.

6. Pain in the Chest: Its Significance and Treatment.
C. C. Aven, Atlanta.
7. Tuberculosis: Its Care.
S. C. Lynn, Savannah.

8. Cardiovascular-renal Problems.
L. L. Whitley, Athens.

To lead the discussion of papers 3, 4, 5, 6, 7 and 8:
J. A. Redfearn, Albany.
W. W. Chrisman, Macon.

FRIDAY, MAY 12, 9:00 A.M.

Eastern War Time

Hotel DeSoto

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 15 minutes.

1. Papilloma of the Ureter.
Ernest Felber, Atlanta.
2. Multiple and Solitary Renal Cysts: Clinical and Pathologic Aspects.
Samuel J. Sinkoe, Atlanta.
3. Renal Ectopia.
Rudolph Bell, Thomasville.
4. The Diagnosis of Hydronephrosis.
Donald E. Beard, Atlanta.
5. How Permanent Are the Results of Transurethral Resections?
Edgar G. Ballenger, Atlanta.
Harold P. McDonald, Atlanta.
R. C. Coleman, Jr., Atlanta.
To lead the discussion of papers 1, 2, 3, 4 and 5:
W. F. Reavis, Waycross.
Harry Righton, Savannah.
6. Skin Cancer: Its Management.
Wm. L. Dobes, Atlanta.
7. Malignant Lymphoma.
John Funke, Atlanta.
To lead the discussion of papers 6 and 7:
Lee Howard, Savannah.
W. P. Nicolson, Atlanta.

ELECTION OF OFFICERS

FRIDAY, MAY 12, 12:00 NOON

Eastern War Time

Hotel DeSoto

President-Elect
First Vice-President
Second Vice-President
Parliamentarian
Two delegates to the A. M. A.
Two alternate delegates to the A. M. A.
*Councilors for the Ninth and Tenth Districts
*Three members of the State Board of Health from the
Sixth, Seventh and Eighth Districts
Selection of meeting place for 1945.
*Nominated by their respective districts.

CONSTITUTION AND BY-LAWS

Chapter II. Section 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject,

provided that each essayist shall have five minutes in which to close the discussion of his paper.

Chapter VIII. Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Chapter VIII. Section 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

No miscellaneous or business matters will be discussed before the scientific meetings, but will be referred to the House of Delegates.

Resolution Adopted 1921

Resolved: That a member who sends in a title of a paper to be placed on the program and is not present to read the paper shall pay the penalty of not having an opportunity to appear on the program for two years, unless he presents an excuse acceptable to the Committee on Scientific Work.

We are instructed by the President to announce to all essayists that the sessions of the Scientific Program of the Association will begin on time, and that the above regulations of the By-Laws in reference to the program will be strictly enforced.

COMMITTEE OF SCIENTIFIC WORK

Mark S. Dougherty, Jr., Atlanta, Chairman
B. H. Minchew, Waycross
Ralph H. Chaney, Augusta
Edgar D. Shanks, Atlanta, Secretary-Treasurer

EXHIBITS

Hotel DeSoto, Savannah
May 9 - 12, 1944

1. Frederick Stearns & Company
Detroit 31, Michigan
2. The Borden Company
350 Madison Avenue, New York, N. Y.
3. Scientific Sugars Company
Columbus, Indiana
4. Walker Vitamin Products, Inc.
Mount Vernon, N. Y.
Joe W. Hunter, 835 S. W. Second St.,
Miami 36, Florida
5. Ortho Products, Inc.
Linden, New Jersey
6. Philip Morris & Company
119 Fifth Ave., New York, N. Y.
7. E. R. Squibb & Sons
745 Fifth Ave., New York, N. Y.
- 7½. Pet Milk Sales Corporation
Arcade Bldg., St. Louis, Mo.
8. Surgical Selling Company
139 Forrest Ave., N. E., Atlanta, Ga.
9. Wm. S. Merrell Company
Lockland Station, Cincinnati, Ohio
- 9½. Petrogalar Laboratories
8100 McCormick Boulevard, Chicago, Ill.
C. E. Davis, 1030 South McDonough St.,
Decatur, Ga.
10. Lederle Laboratories
30 Rockefeller Plaza, New York, N. Y.

- J. DeBardelaben, 145 Forrest Ave., N. E.,
Atlanta, Ga.
11. Eli Lilly and Company
Indianapolis, Ind.
12. Holland-Rantos Company
551 Fifth Avenue, New York, N. Y.
13. American Surgical Supply Company
378 Peachtree St., N. E., Atlanta, Ga.
Mr. Allen, 378 Peachtree St., N. E., Atlanta, Ga.
14. Wachtel's Physician Supply Company
P. O. Box 623, Savannah, Ga.
15. White Laboratories
113 North 13th St., Newark, N. J.
16. John Wyeth & Brother
1600 Arch St., Philadelphia, Pa.
- 16½. Endo Products, Inc.
80-40 101st Street, Richmond Hill 18, N. Y.
John W. Brewer, P. O. Box 699, Atlanta 1, Ga.
17. Winthrop Chemical Company
170 Varick St., New York, N. Y.
- 17½. Burroughs Wellcome Company
9-11 East 41st St., New York, N. Y.
18. Metacine Company
546 McCallie Ave., Chattanooga, Tenn.
Ben Perryman, P. O. Box 242, Atlanta, Ga.
19. Van Pelt & Brown
503 East Franklin St., Richmond, Va.
- 17½. J. A. Majors Company
1301 Tulane Ave., New Orleans, La.
20. Sharp & Dohme
Philadelphia, Pa.
21. Mead Johnson & Company
Evansville, Indiana
22. The Harrower Laboratory, Inc.
Glendale, California
23. Poloris Company
12 High St., Jersey City, N. J.
24. Smith, Kline & French Laboratories
105 North Fifth St., Philadelphia, Pa.
25. Everhart Surgical Supply Company
493 Peachtree St., N. E., Atlanta, Ga.
- 25½. S. M. A. Corporation
8100 McCormick Boulevard, Chicago, Ill.
C. E. Davis, 1030 South McDonough St.,
Decatur, Ga.
26. C. B. Fleet Company
Lynchburg, Va.
W. E. Avery, Atlanta, Ga.
27. Ayerst, McKenna & Harrison
Rouses Point, N. Y.

IN MEMORIAM

- Akerman, Joseph, Augusta, December 5, 1943, aged 71.
Akin, Benjamin F., Jackson, June 12, 1943, aged 74.
Askew, Hulett Hall, Atlanta, February 20, 1944, aged 50.
Barker, Novatus Lee, West Point, January 19, 1944,
aged 79.
Bivings, William Troy, Jr., Atlanta, June 15, 1943,
aged 36.
Blanchard, Pierce Gordon, Appling, October 11, 1943,
aged 55.
Davidson, Albert Alonza, Augusta, March 19, 1944, aged
71.

Deaver, Emory S., Monroe, August 25, 1943, aged 65.
 Dorminy, Edward J., Fitzgerald, Jan. 14, 1944, aged 76.
 Duckett, Pierce Young, Cornelia, November 18, 1943, aged 81.
 Dunn, William Milas, Atlanta, January 4, 1944, aged 62.
 Eberhardt, Benjamin F., Gillsville, February 21, 1944, aged 75.
 Elkin, William Simpson, Atlanta, April 24, 1944, aged 86.
 Emery, Walter Branham, Atlanta, September 8, 1943, aged 67.
 Fishburne, Charles Carroll, Darien, February 3, 1944, aged 59.
 Funderburk, Nicholas Amon, Trion, October 30, 1943, aged 49.
 Gordon, Alexander J., Jesup, June 8, 1943, aged 81.
 Grier, Rufus Lynn, Lumpkin, December 11, 1943, aged 77.
 Hammond, James Tyler, Atlanta, November 2, 1943, aged 87.
 Harvard, Virgil O., Arabi, June 26, 1943, aged 69.
 Hill, Roy Albert, Thomasville, January 1, 1944, aged 55.
 Holden, Alexander Stephens, Ellijay, April 15, 1944, aged 78.
 Hurt, John Sutherland, Atlanta, November 26, 1943, aged 66.
 Johnston, Zebulon Vance, Calhoun, March 13, 1944, aged 61.
 Jones, John Paul, Savannah, April 10, 1944, aged 56.
 Kelly, George Washington, Carlton, October 2, 1943, aged 53.
 Kennedy, Wiley Calvin, Talmo, May 27, 1943, aged 71.
 Klugh, George Fred, Atlanta, March 15, 1944, aged 37.
 Lamb, Erford Haskell, Cornelia, April 23, 1943, aged 66.
 Longino, Lovick Pierce, Milledgeville, November 20, 1943, aged 64.
 McArthur, Charles Holder, Rome, Aug. 2, 1943, aged 48.
 McCrummen, Leon R., LaGrange, January 15, 1944, aged 63.
 McLarty, Marvin Wilson, Atlanta, April 27, 1943, aged 65.
 Miller, George Twigg, Macon, March 17, 1944, aged 91.
 Rainey, Charles Oliver, Camilla, May 14, 1943, aged 60.
 Reid, John F., Buchanan, April 3, 1944, aged 76.
 Robinson, Leslie Benjamin, November 18, 1943, aged 55.
 Rogers, Holbert Asbury, Jeffersonville, August 8, 1943, aged 59.
 Rushing, William Everett Millhaven, May 5, 1943, aged 68.
 Saye, Josiah P., Ball Ground, May 21, 1943, aged 83.
 Sibbett, William Albert, December 7, 1943, aged 58.
 Slack, Henry Richard, LaGrange, Jan. 16, 1944, aged 81.
 Smith, George Leon, Swainsboro, Jan. 4, 1944, aged 83.
 Smith, Simon Harris, Atlanta, June 3, 1943, aged 41.
 Spearman, Guy Fleming, Atlanta, March 8, 1944, aged 63.
 Stewart, Thomas Hill, Jr., Eastman, January 7, 1944, aged 51.
 Tessier, Louie P., Augusta, November 22, 1943, aged 71.
 Thomas, Marion Russell, Savannah, April 8, 1944, aged 66.
 Trimble, George C., East Point, April 9, 1944, aged 80.
 Upshaw, Harry Lee, Social Circle, April 6, 1944, aged 51.
 Wall, John Cox, Eastman, May 18, 1943, aged 61.
 Watkins, Richard S., Columbus, January 29, 1944, aged 85.
 Wise, Samuel P., Plains, November 3, 1943, aged 59.

CONSTITUTION AND BY-LAWS OF THE MEDICAL ASSOCIATION OF GEORGIA

Constitution

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Medical Association of Georgia.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purpose of this Association shall be to federate and bring into one component organization the entire medical profession of the State of Georgia; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state and medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1. This Association shall consist of members and delegates.

Sec. 2. Members: The members of this Association shall be the members of the component county medical societies to which only white physicians shall be eligible.

Sec. 3. Delegates: Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of the Association, and shall consist of: (1) delegates elected by the component county societies; (2) the officers of the Association enumerated in Section 1 of Article IX of the Constitution; (3) ex-presidents and delegates to the American Medical Association.

ARTICLE VI.—COUNCIL

The Council shall be the Board of Trustees and Finance Committee of the Association. The Council shall have full authority and power of the House of Delegates between annual sessions, unless the House of Delegates be called into session as provided in the Constitution and By-Laws.

It shall consist of the Councilors, the President, the President-Elect and the Secretary-Treasurer of the Association. Five of its members shall constitute a quorum.

ARTICLE VII.—SESSIONS AND MEETINGS

Section 1. The annual session shall take place on the second Wednesday in May at such place as shall be designated by the Association, provided that in case of

conflict with the annual session of the American Medical Association or on petition of the county society of the host city made at least six months before the fixed dates for the annual session, the Council may change the dates by publishing a notice in the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA three months before the session.

Sec. 2. Special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council, or upon the petition of twenty delegates.

ARTICLE VIII.—SECTIONS AND DISTRICT SOCIETES

Section 1. The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections, and for the organization of such Councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE IX.—OFFICERS

Section 1. The officers of this Association shall be a President, President-Elect, two Vice-Presidents, a Secretary-Treasurer, a Parliamentarian, and one Councilor for each congressional district in the State.

Sec. 2. The officers, except the Secretary-Treasurer, Parliamentarian and Councilors, shall be elected annually, provided that after the annual meeting of 1928 a President-Elect and not a President shall be elected annually. The President-Elect shall assume his office as President immediately after the next annual meeting following his election. The terms of the Councilors shall be for three years, as may be arranged, viz: the Councilor for the first, second, third and fourth districts for three years; those for the fifth, sixth, seventh, and eighth districts for one year; those for the ninth and tenth districts for two years. The Secretary-Treasurer shall be elected for a term of five years, and the Parliamentarian for a term of three years. All these officers shall serve until their successors are elected and installed (1933).

Sec. 3. The officers of this Association shall be elected by ballot at 12 o'clock noon on the third day of the annual session. Nomination for office shall be made orally, but the nominating speech must not exceed two minutes. The Councilors shall be elected at the same time on nomination by their respective district societies at the annual meetings of such societies preceding the annual session of the Association at which the vacancies occur, but if no nomination from a district society is brought before the Association, the nomination for Councilor may be presented from the floor. If there is no election on the first ballot, the three names receiving the highest number of ballots shall be voted on, the other names being dropped. If there is no election on the second ballot, the two names receiving the highest number of ballots shall be voted on until an election occurs. Delegates to the American Medical Association shall be elected at the same time and in the same manner.

Sec. 4. The members of the State Board of Health shall be nominated by their respective district societies at the annual meeting of such societies preceding the annual session of this Association, and in failure of

nomination by district societies, they may be nominated by the delegates present from each of the district societies, all of which shall be ratified by this Association.

ARTICLE X.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall not exceed the sum of \$10.00 per capita per annum. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be approved by the Finance Committee before action is taken thereon.

ARTICLE XI.—RATIFICATION

The House of Delegates shall submit all questions before it to the Association for ratification.

ARTICLE XII.—THE SEAL

The Association shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIII.—AMENDMENTS

Any amendment that may be offered to the Constitution shall lie over until the next annual session; and for its adoption at such session shall require a two-thirds vote of all present and voting.

By-Laws

CHAPTER I.—MEMBERSHIP

Section 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Association.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component society or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

Sec. 4. Special memberships. In addition to *Regular* members, component societies may elect to membership in their organizations, for membership in this Association, the following groups of members:

(a) *Honorary members.* Any member for old age, length of service, or other good reason, may be elected an honorary member of his county medical society, for membership in this Association. Such member shall, after election, be issued a certificate of honorary membership in this Association.

Non-resident physicians and resident or non-resident lay persons who have distinguished themselves in fields

of endeavor devoted to the advancement of human welfare, may be nominated by county medical societies, or by the House of Delegates of this Association, for honorary membership in this Association. A county medical society shall not nominate for this class of membership more than one person each year. The name of such person shall be sent to the Secretary-Treasurer of this Association thirty days in advance of the annual session. Such person shall be issued an appropriate certificate of honorary membership in this Association if, and when, he is elected to honorary membership by this Association.

(b) *Associate Members.* Eligible to this classification are (1) those regular members of component societies to whom the payment of dues would be an undue hardship; (2) interns, and (3) commissioned medical officers (see Chapter VII, Sec. 5 of these By-Laws) of the United States Army, the United States Navy and the United States Public Health Service while engaged actively in their respective services or if they have been retired on account of age or physical disability, or, after long and honorable service, under the provisions of an Act of Congress.

(c) Honorary and Associate members shall not be subject to the payment of dues to the State Association. They shall enjoy the privilege of full participation in the scientific, social and educational activities of this Association. They shall not vote nor hold office and do not receive the JOURNAL or benefits of Medical Defense.

Sec. 5. Any physician applying for membership in a component medical society of this Association, who has previously practiced in a county in which affiliation with a component society is provided, and who moves to another county without having affiliated with the medical society in the jurisdiction of previous residence, before he is admitted to membership, the cause of his lack of affiliation in the society of his previous residence shall be ascertained.

CHAPTER II.—GENERAL MEETINGS

Section 1. All registered members may attend and participate in the proceedings and discussions of the general meetings. Visitors duly accredited to represent the associations of other states, or of the District of Columbia, not exceeding two in number for each organization, may attend upon, and participate in, the discussion of the general meeting, but shall not have a vote. Such delegates may read papers upon invitation of the Committee on Scientific Work. The general meetings shall be presided over by the President or by one of the Vice-Presidents.

Sec. 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in which to close the discussion of his paper.

Sec. 3. Entertainments. Any social entertainment which may be given by this Association shall be confined to the evening of the second day.

Sec. 4. Guests. Any physician not a resident of this State but a member of his state association, or any dis-

tinguished scientist not a physician, may be counted a guest during any annual session on invitation of the President, and shall be accorded the privilege of participating in the scientific work of that session.

CHAPTER III.—HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet on the day preceding the first day of the annual session, the time to be fixed by the Committee on Scientific Work. It may adjourn from time to time as may be necessary to complete its business; provided that its hours shall conflict as little as possible with the general meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each fraction thereof, but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws shall be entitled to one delegate. Should the regular delegate from any county not be present at the meeting, the President shall appoint a substitute from that county to act.

Sec. 3. Twenty delegates present shall constitute a quorum.

Sec. 4. It shall, through its officers, council and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest of such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until, if possible, every physician in every county of the State has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work as well as home study, and shall endeavor to have the results utilized, and intelligently discussed in the county societies.

Sec. 8. It shall divide the State into councilor districts, one for each congressional district, and when the best interests of the Association and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies and no others shall be members in such district societies.

Sec. 9. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates.

Such committees shall report to the House of Delegates and may be present and participate in the debate thereon.

CHAPTER IV.—DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

In order to give him a better opportunity of becoming more fully acquainted with his duties and with the needs of the Association, the President shall be elected one year prior to taking office. During this time he shall be known as President-Elect and shall be ex-officio member of standing committees, and shall make recommendations at the next annual session.

Sec. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Vice-Presidents, in their order, shall succeed him.

Sec. 3. The Secretary-Treasurer shall give bond in the sum of One Thousand Dollars. He shall demand and receive all funds due the Association, together with the bequests and donations.

Sec. 4. The Secretary-Treasurer shall attend the general meetings of the Association and the meetings of the House of Delegates, and shall keep the minutes of their respective proceedings in separate record books. He shall be ex-officio Secretary of the Council. He shall be custodian of all record-books and papers belonging to the Association. He shall provide for the registration of the members, delegates and accredited visitors at the annual session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and on request transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates with the approval of the Association, and shall make an annual report to the Association. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment and collect the same. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Association. He shall be editor of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA. He shall employ such assistants as may be ordered by

the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

He shall furnish a balance sheet at each annual meeting for the past fiscal year to be published in the JOURNAL. This shall consist of an itemized statement of all financial transactions of the past year, all accounts made, money received and from whom and all moneys disbursed, to whom, and for what purpose, with vouchers attached. A fiscal year includes the period of time between the first day of May and the last day of April.

CHAPTER V.—COUNCIL

Section 1. The Council shall meet on the day preceding the annual session and daily during the session, and at such other times as necessity may require, subject to the approval of the President. It shall meet on the last day of the annual session of the Association to organize and outline work for the ensuing year. It shall elect a chairman and clerk, who, in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. It shall be the business body of the Association and attend to the business of the Association in the interim between meetings.

Sec. 2. Each Councilor shall be organizer and peace-maker for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the conditions of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates on a properly itemized statement, but this shall not be considered to include his expense in attending the annual session of the Association. Each Councilor may appoint a Vice-Councilor to assist him in the performance of his duties in his district.

Sec. 3. The Council shall be the board of censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of a component society, on which an appeal is taken from the decision of an individual Councilor, or to which attention has been called by the Councilor or interested members. It shall hear and decide all questions affecting unethical conduct on the part of any members of any annual session, and its decision in all such matters shall be final when ratified by the Association.

Sec. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and the societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies

until such counties shall be organized separately.

Sec. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Association, and shall have authority to appoint such assistants to the editor as it deems necessary. It shall manage and conduct the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA, which is the organ of the Association, and all money paid into the treasury as dues shall be received as subscriptions to the JOURNAL.

All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Secretary-Treasurer of the Association. As the Finance Committee it shall annually audit the accounts of the Secretary-Treasurer and other agents of this Association, and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year, and the amount of all other property belonging to the Association under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary-Treasurer, the Council shall fill the vacancy until the next annual election.

Sec. 6. All reports on scientific subjects and all scientific discussions and papers heard before the Association, shall be referred to the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA for publication. The editor, with the consent of the Councilor for the district in which he resides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Sec. 7. All commercial exhibits during the annual sessions shall be within the control and direction of the Council.

Sec. 8. In the absence of a Councilor and Vice-Councilor the President is empowered to appoint a representative from the district as acting Councilor, who shall have full rights and powers of a Councilor.

Sec. 9. Each Councilor shall render at every session a written report of each county in his district.

Sec. 10. Any member of the Council who fails to attend two regular successive sessions of the Council, or whose district does not show evidence of the performance of his duties during the year, unless he renders an acceptable excuse to the Council, is subject to have his position declared vacant by the President and a successor appointed by the President.

CHAPTER VI.—COMMITTEES

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation

A Committee on Arrangements

A Committee on Medical Defense, and such other committees as may be necessary.

Sec. 2. The Committee on Scientific Work shall consist of four members, one of whom shall be the Secretary-Treasurer. The other three members shall be ap-

pointed for terms of one, two, and three years, respectively. The vacancy which will occur each year by the expiration of the term of one member shall be filled by the President with an appointment for three years. The member who has the shortest time to serve shall be chairman. The committee shall determine the character and scope of the scientific proceedings of the Association for each session. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

This By-Law shall not prohibit the Committee on Scientific Work from inviting not more than two distinguished members of the national organization to deliver addresses or read papers at any annual meeting.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary, the Commissioner of Health of the State of Georgia, and a sub-committee of three members from each Councilor District appointed by the chairman when needed. It shall represent the Association in securing and enforcing legislation in the interests of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local and national affairs and elections.

Sec. 4. The Committee on Arrangements shall be appointed by the component society in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Association and of the House of Delegates and their respective committees, and shall have general charge of all arrangements. Its chairman shall report an outline of the arrangements to the Secretary-Treasurer for publication in the program, and shall make additional announcements during the session as occasion may require.

Sec. 5. The Committee on Medical Defense shall consist of five members, of whom the Chairman of the Council and the Secretary-Treasurer of the Association shall be members. The other members, one of whom shall act as chairman of the committee, shall be elected by the Council for a period of five years. Those elected at this meeting (April 19, 1916), shall serve one, three and five years, respectively.

It shall be the duty of the Committee on Medical Defense to investigate and defend all damage suits against the Medical Association of Georgia; to investigate all claims of civil malpractice made against its members; to take full charge of such cases, which after investigation, they decide to be proper cases for defense; to defend all such cases in the courts of last resort, to furnish General Counsel and pay court cost usual to such litigation, and reasonable fees for local attorneys as shall be arranged by General Counsel. Provided that any member who has indemnity insurance shall have such insurance bear its portion of the expense. However, they shall not pay, or obligate the Medical Association of Georgia to pay any judgment rendered against any member upon the final determination of any case. They shall be empowered to contract with such agents or

attorneys as they may deem necessary for the proper carrying out of this By-Law.

The assistance for defense, as herein provided, shall be available only to members of the Medical Association of Georgia in good standing. Any member who has not paid his annual dues by April 1st shall not be considered in good standing in the application of this By-Law.

Any member or members of the Association threatened with suit for civil malpractice shall immediately communicate with the Secretary of the Association and shall give full and complete information in reference to all the circumstances alleged in the complaint. The Secretary shall proceed immediately to investigate the circumstances reported and shall advise with the attorneys or agents employed by the committee for this purpose. The members sued, or threatened with suit, shall be consulted and shall have the complete confidence of the committee in all transactions connected with the investigation in question. The committee shall have the authority to require of a constituent society or the president thereof, the appointment of a committee of investigation in any such case, and it may direct the committee so appointed to report to the Committee on Medical Defense and not to the society from which it was appointed.

The Committee on Medical Defense may also, at its discretion, arrange to prosecute illegal practitioners in the State of Georgia and assist in the enforcement of the Medical Practice Act of this State.

CHAPTER VII.—COUNTY SOCIETIES

Section 1. All county societies now in affiliation with this Association, or those which may hereafter be organized in the State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charter shall be issued thereto.

Sec. 3. Charters shall be issued only on approval of the Council, and shall be signed by the President and Secretary of this Association. The Association shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component medical society shall be chartered in any county.

Sec. 5. Each county society shall judge of the qualifications of its own members, but as such societies are the only portals to this Association, every legally registered white physician who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Physicians who have been legally registered in other states or who have been licensed by the National Board of Medical Examiners, or who are employed as teachers in the medical schools, or are in the service of the State, a county, a municipality, or the United States Government other than the regular medical corps of the United

States Army, the United States Navy and the United States Public Health Service, may be accepted for membership in county medical societies, for membership in this Association, provided they meet the requirements of regular membership. Before a charter is issued to any county medical society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. No matter what the unethical conduct or discipline of the members of the county society may be, both plaintiff and defendant shall have the right to appeal to the Council, whose decision shall be final when ratified by the Association.

Sec. 7. In hearing appeals the Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component county society moves to another county in this State, he shall be given a written certificate of these facts by the secretary of his society, without cost, for transmission to the secretary of the society in the county to which he moves. Pending his acceptance or rejection by the society in the county to which he moves, such members shall be considered to be in good standing in the county society from which he was certified and in the Medical Association of Georgia to the end of the period for which his dues have been paid.

Sec. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

Sec. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting in advance of the annual session of this Association, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each fifty members, or fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Association at least ten days before the annual session.

Sec. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report

he shall be certain to account for every physician who has lived in the county during the year.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and lists of non-affiliated physicians of the county, to the Secretary of this Association each year, thirty days before the annual session.

Sec. 14. Any county society which fails to pay its assessment, or make the report required on or before April 1 of each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association, or of the House of Delegates, until such requirement has been met.

Sec. 15. The Secretary of each county society shall report to the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

CHAPTER VIII.—RULES AND ETHICS

Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

Sec. 3. The principles of medical ethics of the American Medical Association shall be those of this Association.

Sec. 4. Any member of this Association, on locating in a new place for practicing his profession, may place his professional card, containing name, address, telephone number, and statement as to whether or not his practice will be limited to any particular class of diseases, in the local paper for a period of not longer than one month. The placing of such card for this period of time shall not be considered unethical. The use of the word "specialist" by any member in connection with his name in any newspaper, telephone directory, or other public places, shall be considered unethical.

CHAPTER IX.—AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the Association after the amendment has lain on the table for one day.

RESOLUTIONS.

MEDICAL ASSOCIATION OF GEORGIA 1921

Resolved, That a member who sends in a title of a paper to be placed on the program and is not present to read the paper, shall pay the penalty of not having an opportunity to appear on the program for two years, unless he presents an excuse acceptable to the Committee on Scientific Work.

1922

Be it Resolved, That the House of Delegates recommend that the Committee on Scientific Work make available on the program of the State Association space for two papers from each Council district; that a definite time be assigned for reading and discussion of each of these papers, and they be given precedence over all other business. The said papers are to be selected by the Committee on Scientific Work, and, in case a writer does not respond when his name is called, some paper will be substituted and the schedule not deranged. The President ruled that this resolution is only a recommendation and not a law.

1923

Resolved, That the delegates to the A. M. A. elected at this and succeeding meetings of the Medical Association of Georgia be installed January 1st, following their election, and that their term of service run for two years thereafter. And be it further

Resolved, That our delegates be authorized to attend the regular and any called meeting of the House of Delegates of the American Medical Association during the term to which they are elected.

1929

Resolved, That in order to expedite the business of the House of Delegates, all reports of special and regular committees of the Association involving matters of public policy, legislation or appropriation of the funds of the Association be submitted in writing to the Secretary of the Association a sufficient time in advance of the regular annual session, about March 15th, to permit the publication of said recommendations either in the official program prior to the session or in a special circular that shall be mailed to the constituent societies, in order that the delegates may be advised of the proposed changes.

1943

Resolved, That the House of Delegates set the amount of dues at \$7.00 per capita for the year 1944.

COUNTIES REPORTING FOR 1944

Elbert County Medical Society

The Elbert County Medical Society announces the following officers for 1944:

President—G. A. Ward, Elberton
Vice-President—W. A. Johnson, Elberton
Secretary-Treasurer—A. S. Johnson, Elberton
Delegate—D. N. Thompson, Elberton
Alternate Delegate—W. A. Johnson, Elberton

Tri County Society (Calhoun-Early-Miller)

The Tri County Medical Society announces the following officers for 1944:

President—R. R. Bridges, Leary
Vice-President—J. S. Beard, Edison
Secretary-Treasurer—W. H. Wall, Blakely
Delegate—W. H. Wall, Blakely
Alternate Delegate—J. C. Standifer, Blakely.

WOMAN'S AUXILIARY

President—Mrs. Olin S. Cofer, 948 Lullwater Road, Atlanta.
 President-Elect—Mrs. W. T. Randolph, Winder.
 First Vice-President—Mrs. Ralph Fowler, Marietta.
 Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.
 Third Vice-President—Mrs. Richard Binion, Milledgeville.
 Recording Secretary—Mrs. Chas. Usher, 6 East Liberty St., Savannah.

: OFFICERS 1943-44

Corresponding Secretary—Mrs. H. H. Askew, 1329 Springdale Road, Atlanta.
 Treasurer—Mrs. Lucius N. Todd, Rural Delivery No. 2, Augusta.
 Historian—Mrs. W. W. Puett, Norcross.
 Parliamentary—Mrs. Lee Howard, 625 East 44th St., Savannah.
 Press and Publicity—Mrs. J. Harry Rogers, 1325 Peachtree St., N.E., Atlanta.



MRS. OLIN S. COFER, Atlanta
 President, 1943-44

INVITATIONS

To the Members of the Woman's Auxiliary:

In behalf of the Woman's Auxiliary to the Georgia Medical Society of Chatham County, it gives me great pleasure to extend a most cordial invitation to all members of other Auxiliaries in the State to meet with us at the annual State Convention in Savannah, May 9-12.

At that time we will have an opportunity to renew old acquaintances and to welcome new members into the work of the organization, which is so essential to the medical profession at this particular time.

We hope that you will find it possible to attend and make this one of the best conventions ever held in historic old Savannah.

Sincerely,

MRS. ROBERT V. MARTIN, *President*,
 Woman's Auxiliary to the Georgia
 Medical Society of Chatham County

Dear Auxiliary Members:

The Twentieth Annual Convention of the Woman's Auxiliary to the Medical Association of Georgia will meet in Savannah May 9-12. Let me extend to every Auxiliary member and also to each doctor's wife in Georgia an invitation to attend the convention.

From past experience we know what a cordial welcome awaits us in Savannah through the hospitality that will be extended to us by the members of the Auxiliary to the Georgia Medical Society of Chatham County.

Our Annual Meeting gives us an opportunity to renew friendships, greet new members, and make progress in our service to the medical profession and to further our wartime activity.

With keen anticipation of a successful meeting, I am

Sincerely yours,

Mrs. Olin S. Cofer.

MRS. OLIN S. COFER, *President*
 Woman's Auxiliary to the
 Medical Association of Georgia

CONVENTIONS AND PRESIDENTS

Honorary President for Life—Mrs. James N. Brawner, Sr., Atlanta.

1924—Augusta—(Organization)—Mrs. C. W. Roberts, Atlanta, Temporary Chairman

1925—Atlanta—Mrs. James N. Brawner, Sr., Atlanta

1926—Albany—Mrs. William H. Myers, Savannah

1927—Athens—Mrs. C. W. Roberts, Atlanta

1928—Savannah—Mrs. Paul Holiday, Athens (Mrs. J. C. Moore, Gaffney, S. C.)

1929—Macon—Mrs. Charles C. Hinton, Macon

1930—Augusta—Mrs. Marion T. Benson, Atlanta

1931—Macon—Mrs. Charles C. Harrold, Macon

1932—Savannah—Mrs. Ralston Lattimore, Savannah

1933—Macon—Mrs. S. T. R. Revell, Louisville

1934—Augusta—*Mrs. J. Bonar White, Atlanta

1935—Atlanta—Mrs. J. E. Penland, Waycross

1936—Savannah—Mrs. Ernest R. Harris, Winder

1937—Macon—Mrs. William R. Dancy, Savannah

1938—Augusta—Mrs. Ralph Chaney, Augusta

1939—Atlanta—Mrs. Warren A. Coleman, Eastman

1940—Savannah—Mrs. Eustace A. Allen, Atlanta

1941—Macon—Mrs. H. G. Banister, IIa
 1942—Augusta—Mrs. Lee Howard, Savannah
 1943—Atlanta—Mrs. Lon J. King, Macon

*Deceased

PROGRAM

TWENTIETH ANNUAL CONVENTION
 WOMAN'S AUXILIARY TO THE
 MEDICAL ASSOCIATION OF GEORGIA
 Hotel DeSoto, Savannah
 May 9-12, 1944

OFFICERS AND COMMITTEES

Executive Board

President—Mrs. Olin S. Cofer, Atlanta
 President-Elect—Mrs. W. T. Randolph, Winder
 First Vice-President—Mrs. Ralph Fowler, Marietta
 Second Vice-President—Mrs. L. W. Williams, Savannah
 Third Vice-President—Mrs. Richard Binion, Milledgeville
 Recording Secretary—Mrs. Charles Usher, Savannah
 Corresponding Secretary—Mrs. Hulett H. Askew, Atlanta
 Treasurer—Mrs. Lucius N. Todd, Augusta
 Historian—Mrs. W. W. Puett, Norcross
 Parliamentarian—Mrs. Lee Howard, Savannah

CHAIRMAN OF STANDING COMMITTEES PAST PRESIDENTS OF STATE AUXILIARY

DISTRICT MANAGERS

PRESIDENTS OF COUNTY AUXILIARIES

Chairmen of Standing Committees

Organization—Mrs. W. T. Randolph, Winder
 Health Education—Mrs. Ralph Fowler, Marietta
 Hygeia—Mrs. L. W. Williams, Savannah
 Scrapbook—Mrs. Richard Binion, Milledgeville
 Public Relations—Mrs. Wallace Bazemore, Macon
 Legislation—Mrs. J. C. Blalock, Atlanta
 Press and Publicity—Mrs. J. Harry Rogers, Atlanta
 Visual Education—Mrs. Fred Rawlings, Sandersville
 Doctor's Day—Mrs. Leonard Massengale, Lumpkin
 Research in Romance of Medicine—Mrs. Cleveland Thompson, Millen
 Student Loan Fund—Mrs. H. G. Banister, IIa
 Jane Todd Crawford Memorial—Mrs. W. C. Mitchell, Smyrna
 Revisions—Mrs. Edwin Allen, Milledgeville
 Archives—Mrs. Eustace Allen, Atlanta
 Exhibits—Mrs. E. N. Gleaton, Savannah
 "Mrs. James N. Brawner Trophy"—Mrs. J. Lon King, Macon
 Bulletin—Mrs. Stacy Howell, Atlanta
 Wartime Service—Mrs. James N. Brawner, Sr., Atlanta

DISTRICT MANAGERS

First District—Mrs. W. E. Simmons, Metter
 Second District—Mrs. J. A. Redfearn, Albany
 Third District—Mrs. J. L. Gallemore, Perry
 Fifth District—Mrs. Don C. Cathcart, Atlanta
 Sixth District—Mrs. J. B. Dillard, Davisboro
 Seventh District—Mrs. J. E. Billings, Calhoun
 Eighth District—Mrs. Tom V. Willis, Brunswick
 Ninth District—Mrs. Stephen Theo Ross, Winder
 Tenth District—

PRESIDENTS OF COUNTY AUXILIARIES

Baldwin County*—Mrs. Sam Anderson, Milledgeville
 Barrow County—Mrs. C. B. Almand, Winder
 Bibb County—Mrs. C. C. Harrold, Macon
 Bulloch-Candler-Evans Counties—Mrs. W. E. Floyd, Statesboro
 Burke-Jenkins-Screven Counties—
 Chatham County (Georgia Medical Society)—Mrs. Robert V. Martin, Savannah
 Cherokee-Pickens Counties—Mrs. J. Newton Coker, Canton
 Clarke-Oglethorpe-Oconee-Madison Counties—Mrs. W. H. Birdsong, Athens
 Cobb County—Mrs. G. O. Allen, Marietta
 Colquitt-Brooks Counties—Mrs. Funderburke, Moultrie
 Dodge County—Mrs. I. J. Parkerson, Eastman
 Dougherty County—Mrs. W. M. Feild, Albany
 Fulton County*—Mrs. J. Harry Rogers, Atlanta
 Glynn County—Mrs. T. V. Willis, Brunswick
 Gordon County—Mrs. Z. V. Johnston, Calhoun
 Gwinnett County—Mrs. D. C. Kelley, Lawrenceville
 Habersham County—Mrs. D. H. Garrison, Clarksville
 Houston-Peach Counties—Mrs. R. L. Cater, Perry
 Jackson County—Mrs. M. B. Allen, Hoschton
 Lamar County—Mrs. J. H. Jackson, Barnesville
 Macon County—Mrs. H. C. Derrick, Oglethorpe
 Muscogee County—Mrs. W. C. Cook, Columbus
 Polk County—Mrs. John McGehee, Cedartown
 Randolph-Terrell Counties*—Mrs. Leonard Massengale, Lumpkin
 Richmond County—Mrs. Robert E. Leonard, Augusta
 Stephens County—Mrs. W. B. Hellar, Toccoa
 Sumter County—Mrs. Russell Thomas, Americus
 Tift County—Mrs. W. F. Zimmerman, Tifton
 Ware County—Mrs. W. M. Flanagan, Waycross
 Washington County—Mrs. J. B. Dillard, Davisboro
 *Awards—1943 "Mrs. James N. Brawner, Sr., Trophy" to Baldwin County Auxiliary.
 Exhibits—"Mrs. J. Bonar White Award" to Fulton County Auxiliary.
 Scrapbook—"Mrs. J. Bonar White Award" to Randolph-Terrell Counties Auxiliary.

COMMITTEES

GENERAL CHAIRMEN

Mrs. Lehman W. Williams, Savannah
 Mrs. Lee Howard, Savannah

CREDENTIALS AND REGISTRATION

Mrs. Harry M. Kandel, Chairman, Savannah
 Mrs. William R. Dancy, Savannah
 Mrs. Rufus E. Graham, Savannah
 Mrs. George H. Johnson, Sr., Savannah
 Mrs. John L. Elliott, Savannah
 Mrs. Harry Y. Righton, Savannah
 Mrs. A. A. Morrison, Sr., Savannah

ARRANGEMENTS

Mrs. Elliott Wilson, Chairman, Savannah
 Mrs. Charles Usher, Savannah
 Mrs. Elton S. Osborne, Savannah

DECORATIONS

Mrs. G. Herman Lang, Savannah
 Mrs. Antonio J. Waring, Savannah
 Mrs. B. E. Miller, Savannah
 Mrs. Lawrence Lee, Savannah
 Mrs. H. C. Frech, Savannah

Mrs. John K. Train, Savannah
 Mrs. Wm. R. Dancy, Savannah
 Mrs. Elliott Wilson, Savannah
 Mrs. John W. Daniel, Sr., Savannah
 Mrs. R. V. Harris, Savannah

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 Mrs. Edward J. Whelan, Savannah
 Mrs. Lehman W. Williams, Savannah
 Mrs. Lee Howard, Savannah
 Mrs. G. Herman Lang, Savannah
 Mrs. Elliott Wilson, Savannah
 Mrs. R. Lester Neville, Savannah
 Mrs. Ruskin King, Savannah
 Mrs. Harry Kandel, Savannah
 Mrs. Charles Usher, Savannah
 Mrs. Wm. R. Dancy, Savannah
 Mrs. Ralston Lattimore, Savannah
 Mrs. C. A. Henderson, Savannah
 Mrs. H. T. Compton, Savannah
 Mrs. E. Iseman, Savannah
 Mrs. Howard Exley, Savannah
 Mrs. John S. Howkins, Savannah
 Mrs. D. B. Fillingim, Savannah
 Mrs. R. L. Oliver, Savannah
 Mrs. J. A. Usher, Savannah
 Mrs. C. F. Holton, Savannah
 Mrs. D. B. Edwards, Savannah
 Mrs. Robert Drane, Savannah
 Mrs. W. A. Cole, Savannah
 Mrs. Marion Thomas, Savannah
 Mrs. C. T. Brown, Savannah
 Mrs. V. H. Bassett, Savannah
 Mrs. Craig Barrow, Savannah
 Mrs. J. O. Baker, Savannah
 Mrs. J. C. O'Neill, Savannah
 Mrs. Emerson Ham, Savannah
 Mrs. W. D. Wilson, Savannah

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 Mrs. Emerson Ham, Savannah
 Mrs. A. A. Morrison, Jr., Savannah

LUNCHEON

Mrs. R. Lester Neville, Savannah, Chairman
 Mrs. Samuel Levington, Savannah
 Mrs. Julian F. Chisholm, Savannah
 Mrs. E. N. Gleaton, Savannah
 Mrs. G. H. Johnson, Jr., Savannah
 Mrs. C. G. Redmond, Savannah
 Mrs. Samuel F. Rosen, Savannah

TEA

Mrs. Julian K. Quattlebaum, Savannah, Chairman
 Mrs. Harry H. McGee, Savannah
 Mrs. G. T. Olmstead, Savannah
 Mrs. E. N. Maner, Savannah
 Mrs. Daniel R. Keating, Savannah
 Mrs. W. R. Dancy, Savannah
 Mrs. S. J. Hall, Savannah
 Mrs. Eric Johnson, Savannah
 Mrs. Charles R. Raybun, Savannah

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 Mrs. J. Reid Broderick, Savannah

Mrs. A. A. Morrison, Jr., Savannah
 Mrs. E. C. Demmond, Savannah
 Mrs. L. W. Shaw, Savannah

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 Mrs. Shirley Winder, Savannah
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 Mrs. A. Leon Hollaman, Savannah
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 Mrs. Daniel R. Keating, Savannah

TIMEKEEPER

Mrs. Ralston Lattimore, Savannah, Chairman
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 Mrs. Charles R. Raybun, Savannah
 Mrs. John L. Elliott, Savannah
 Mrs. H. C. Frech, Savannah

BULLETIN

Mrs. S. C. Lynn, Savannah, Chairman
 Mrs. H. T. Compton, Savannah
 Mrs. Charles R. Raybun, Savannah
 Mrs. E. C. Demmond, Savannah
 Mrs. R. L. Oliver, Savannah

PUBLICITY

Mrs. Lee Howard, Savannah, Chairman
 Mrs. A. A. Morrison, Jr., Savannah
 Mrs. G. H. Johnson, Sr., Savannah

PROGRAM

HEADQUARTERS HOTEL DeSOTO

TUESDAY, MAY 9, 1944

ENTERTAINMENT AND PROGRAM

*Executive Board Meeting**Registration*

Tuesday, May 9, 5:30 to 7:00 P.M.—Hotel DeSoto
 Wednesday, May 10, 9:30 to 12:00 A.M.—General Meeting
 Wednesday, May 10, 1:00 P.M.—Luncheon, Hotel DeSoto
 Wednesday, May 10, 4:30 to 6:00 P.M.—Tea, Colonial Dames House. Given by the Woman's Auxiliary to the Georgia Medical Society.
 Wednesday, May 10, 7:00 P.M.—Presidents' Dinner
 Wednesday, May 10, 8:00 P.M.—Public Meeting, Medical Association of Georgia
 Thursday, May 11, 9:30 to 12:00 A.M.—General Meeting
 Thursday, May 11, 7:30 P.M.—Joint Banquet. All members of the Medical Association and their wives are invited.

PROGRAM

Wednesday, May 10, 1944, 9:30 A.M.

Eastern Standard Time

Hotel DeSoto

Call to Order by the President, Mrs. Olin S. Cofer, Atlanta

Invocation

Dr. Leroy G. Cleverdon, Savannah, Pastor, First Baptist Church

Address of Welcome

Mrs. Robert V. Martin, Savannah, President, The Woman's Auxiliary to the Georgia Medical Society (Chatham County)

Response to the Address of Welcome

Mrs. Hal M. Davison, Atlanta

Introduction of Officers and Honor Guests

Mrs. Ralston Lattimore, Savannah

Report of Advisory Committee to the Woman's Auxiliary
Dr. James N. Brawner, Sr., Atlanta, Chairman

Commando Marys in Auxiliary Work

Dr. W. A. Selman, Atlanta, President, Medical Association of Georgia.

ADDRESS

Mrs. John P. Helmick, Fairmont, West Virginia, President, Woman's Auxiliary to the Southern Medical Association

Rules Governing Convention Procedure

Mrs. Lee Howard, Savannah, Parliamentarian

Introduction of Pages

Report of Executive Committee

Report of Entertainment Committee

Mrs. Ruskin King, Savannah

Report of District Managers and County Presidents

Report of Registration Committee

Mrs. Harry M. Kandel, Savannah

Business

Reading of Minutes

Adjournment

PROGRAM

Thursday, May 11, 9:30 A.M. Hotel DeSoto
Call to Order by the President, Mrs. Olin S. Cofer, Atlanta

Invocation

Father Daniel J. Bourke, Savannah, Pastor of Church of The Most Blessed Sacrament

Address of Welcome

Mrs. Harry M. Kandel, Savannah, Second Vice-President of the Woman's Auxiliary to the Georgia Medical Society (Chatham County)

Response to the Address of Welcome

Mrs. Tom V. Willis, Brunswick, Eighth District Manager

ADDRESS

"What Aid the Auxiliary Can Give the County Medical Society"

Dr. Cleveland Thompson, Millen, President-Elect, Medical Association of Georgia

ADDRESS

Mrs. Eben J. Carey, Wauwatosa, Wisconsin, President, Woman's Auxiliary to the American Medical Association

Memorial Service

Mrs. Samuel F. Rosen, Savannah

Report of Meeting of Auxiliary to the American Medical Association

Mrs. Edgar H. Greene, Atlanta

Report of Meeting of Auxiliary to the Southern Medical Association

Mrs. Charles H. Daniel, College Park

Report of Officers

Report of Auditing Committee

Report of Resolution Committee

Report of Registration Committee

Report of Awards Committee

Report of Courtesy Committee

BUSINESS

Report of Nominating Committee

Election of Officers

Presentation of President's Pin to Retiring President

Mrs. Joseph Yampolsky, Atlanta

Announcement by President

Mrs. W. T. Randolph, Winder

Adjournment

Thursday, May 11, 1944

Post-Convention Board Meeting

Mrs. W. T. Randolph, Winder, President

RULES TO GOVERN THE CONVENTION

1. To gain recognition, a delegate is requested to rise address the chair, give her name and Auxiliary.
2. No delegate shall speak more than twice on the same subject, and is limited to two minutes each time.
3. Reports shall not be read from Auxiliaries which are not represented by delegates but shall be filed with the Secretary.
4. All original motions or resolutions shall be made by submitting two copies: one to the Resolutions Committee and one to the Recording Secretary.
5. Reports of delegates and district managers are limited to two minutes.
5. Reports of delegates and district managers are limited to two minutes.
6. No one is entitled to vote before she is registered.

Whispering conversations greatly retard the business of a meeting. Please be prompt. Meetings will begin promptly at the time stated in the program. To expedite the business, reports must conform to the time allotted.

NEWS ITEMS

The Bibb County Medical Society met at Ridley Hall, Macon, March 21. Colonel Cameron discussed "Civilian Medical Care at Warner Robins."

Dr. Geo. L. Touchton, Savannah, was appointed Chatham County physician March 3.

Dr. Eustace A. Allen announces the removal of his office to Suite 607, Medical Arts Building, Atlanta. Office hours: 12-2 and 4-6.

Dr. John L. Elliott, Savannah, has been appointed medical director of the new Savannah Tuberculosis Sanatorium.

The Alabama, Florida, Georgia and South Carolina section of the American College of Surgeons met at the George Washington Hotel, Jacksonville, Fla., March 27. The Board of Governors of Georgia are Dr. Frank K. Boland and Dr. J. R. McCord, both of Atlanta; members of the Executive Committee for Georgia are Dr. A. H. Hilsman, Albany; Dr. B. H. Minchew, Waycross; Dr. A. J. Mooney, Statesboro; Dr. Thomas P. Goodwyn, Atlanta; and Dr. C. F. Holton, Savannah. Dr. Frank K. Boland presided.

Dr. Bomar A. Olds announces the opening of his office in Suite 310 Medical Arts Building, Atlanta.

The Georgia Medical Society met at the Society's Hall, Savannah, March 23. Major Justus C. Pickett, Savannah Air Base, spoke on "Internal Derangements of the Knee."

(Continued on page 128)

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone WALnut 8911; residence, VERNon 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone WALnut 8911; residence, JACKson 7979.

THE PRIVATE DUTY NURSE MEETS THE CHALLENGE

MRS. JAMES W. GEESLIN, R.N., Atlanta
Chairman
Private Duty Section, G. S. N. A.

Many times every day one hears the complaint, "He needs a private nurse, but we cannot locate one." This condition is the result of so many former private duty nurses now serving with the armed forces, coupled with the fact that "luxury nursing" is still being indulged. The role of the private duty nurse during wartime is to devise methods to overcome the problems as they arise.

The scarcity of private duty nurses has been somewhat ameliorated through the abandonment of the antiquated and laborious twelve-hour duty periods and the adoption of the eight-hour shift. For the graduate nurse that has married and is possibly rearing future citizens, the twelve-hour period of duty was an impossibility. She could not spare that much time from her home obligations. The eight-hour shift has proven a means of drawing thousands of retired graduate nurses back to active duty. The incorporation of the eight-hour duty is an important step forward, but it alone has not and cannot completely meet the emergency.

The private duty nurse, in cases of critical illness and when additional nurses are not obtainable, has been known to nurse a double shift, or a period of sixteen continuous hours. In countless instances involving postoperative anesthesia, she remains with the patient as long as constant attention is necessary until the patient can revert to general floor care.

"Hourly nursing" on the part of the private duty nurse is also assisting in meeting the wartime shortage of professional nursing care. In cases where a number of patients are only moderately ill and require care for only a few hours daily, it is possible for the nurse to distribute her time among several patients, remaining with each one only the amount of time necessary.

"Group nursing" according to Mrs. Estelle

Glynn, R.N., President First District, G. S. N. A., has been successfully employed at Savannah, Georgia. Mrs. Glynn reports that recently six patients, none of them critically ill, were brought to a local hospital from a shipyard. The six patients were placed in a small ward and private duty nurses assigned to care for them, thus three nurses only were required to serve an equivalent of 144 patient hours in a single calendar day.

"Luxury nursing" is nonessential and should be out for the duration. The private duty nurse is very essential during critical illness or when a patient requires constant bedside care. When the patient recovers sufficiently to go on routine nursing care, it is the duty of the private duty nurse to obtain her release, with the attending physician's approval. The patient and the patient's family should be impressed with the fact that he is on the road to recovery and therefore does not require constant professional care. We private duty nurses are the logical ones to point out to our patients and their families the necessity of foregoing our services when they are no longer absolutely necessary; however, the cooperation of the doctor, hospital, and patient are of vital importance in releasing nurses from non-essential positions for essential service. The perspective of the family has been distorted by anxiety; our duty is to restore it to normal. Ours is a profession of service. We have a moral obligation in this great emergency. We must make available our services to the greatest number who need us. We must conscientiously adhere to this practice in the Nation's hour of need.

Many private duty nurses in addition to their regular work or who cannot devote full time to nursing are serving as part time office assistants to physicians. Others relieve in hospitals as general floor nurses. The foregoing instances are only a few of the many that could be cited. In addition, the private duty nurse is giving generously of her time, talent, and training in teaching Red Cross first aid and home nursing courses and also by assisting in the recruitment of student or cadet nurses and graduate nurses for the armed services.

NEWS ITEMS

(Continued from page 125)

The Seventh District Medical Society met at the Woman's Club Building, Cedartown, April 5. The members and members of the Woman's Auxiliary were guests of the Polk County Medical Society. Dr. R. D. Walter, Calhoun, read a paper entitled, "Short Hospitalization for Obstetrical Patients"; was discussed by Dr. J. T. McCall, Rome, and Dr. Fred H. Simonton, Chickamauga. Dr. James L. Bibb, Chattanooga, Tenn., spoke on "Treatment of Medical Emergencies"; the discussion was led by Dr. H. L. Erwin, Dalton, and Dr. P. O. Chaudron, Cedartown. "Address" by Dr. W. A. Selman, president of the Medical Association of Georgia. Dr. Roy R. Kracke, Emory University, spoke on "Diagnosis and Treatment of the Purpuric Disease"; discussion was led by Dr. W. H. Perkinson, Marietta, and Dr. Trammell Starr, Dalton. Dr. Leland G. Baggett, Atlanta, read a paper on "The Modern Concept of Peptic Ulcers"; the discussion was led by Dr. M. M. Hagood, Marietta, and Dr. Wm. U. Hayden, Trion. Officers of the society are Dr. W. D. Hall, Calhoun, president; Dr. William Harbin, Rome, president-elect; and Dr. W. C. Mitchell, Smyrna, secretary-treasurer. Committee on Arrangements were: Dr. O. R. Styles, Cedartown, chairman; Dr. S. L. Whitely, Cedartown; and Dr. R. F. Spanger, Cedartown. Dr. W. A. Selman, president of the Association; Dr. Edgar D. Shanks, secretary-treasurer of the Association, and Dr. George Fuller, all of Atlanta, attended the meeting.

Dr. Russel L. Haden, chief, Medical Division, Cleveland Clinic Foundation Hospital, Cleveland, Ohio, was guest speaker on "Leukemia" at a special meeting of the Fulton County Medical Society, Atlanta, March 30.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, April 6. The scientific program consisted of a "Symposium on Backache." Titles of papers and names of speakers follow: "Internal Medicine" by Dr. I. Malcolm Gibson; "Gynecology," Dr. Lawrence Matthews; "Urology," Dr. Stephen T. Brown; "Orthopedics," Dr. Lawson Thornton; "Neurology," Dr. Edgar F. Fincher, Jr.

Titles of articles published in the April 6 issue of The Bulletin of the Fulton County Medical Society were: "President's Message" by Dr. Ben H. Clifton; "The Fight Against Cancer," Mrs. Murdock Euen, commander, Fifth District, Women's Field Army Cancer Control; "The Atlanta Tuberculosis Association," Mrs. Milton R. Bell, executive secretary; "Tuberculosis Services Offered by Fulton County Health Department," Dr. R. Floyd Payne; "New Doctors Should Make Themselves Known," Dr. Frank K. Boland; "Abstracts from Symposium on Diarrheas—The Management of Non-Specific Diarrheas," Dr. McClaren Johnson; "Diarrhea in Infants and Children," Dr. T. Irvin Willingham; "Laboratory Aid in Diarrhea," Lt. Col. Perry T. Hough, M. C., Lawson General Hospital; "Diarrhea As A Symptom of Some Protologic Condition," Dr. Marion C. Pruitt; "X-Ray as an Aid in Diagnosis of Diarrhea," James J. Clark.

Dr. Abe J. Davis, formerly of Swainsboro, has been appointed Richmond County Commissioner of Health.

The Second District Medical Society met at the Finney General Hospital, Thomasville, April 13.

The Eighth District Medical Society met at Waycross on April 11. Titles of papers on the scientific program were: "The Treatment of Gonorrhea" by Dr. Austin V. Deibert, senior surgeon, U. S. Public Health Services, Medical Officer in Charge of the Southeastern Medical Center, Savannah; "Problems in the Management of Station Hospitals," Major Fraleigh, M. C., U. S. Army, Waycross; "Address," Dr. Cleveland Thompson, Millen, president-elect of the Medical Association of Georgia; "Penicillin Therapy in Relation of Surgery," Major Milford F. Hatcher, M. C., U. S. Army, Thomasville.

Dr. Jas. E. Paullin, Atlanta, has been elected to the Board of Regents of the American College of Physicians.

Lt. Col. Dan C. Elkin, M. C., U. S. Army, formerly of Atlanta, and professor of surgery at Emory University School of Medicine, and now chief of surgical service at Ashford General Hospital, W. Va., has been appointed as one of six prominent physicians to help plan postwar medical education.

Dr. Roy R. Kracke, Emory University, has accepted a position as dean of a medical school located in Birmingham, Ala., which is a part of the University of Alabama.

OBITUARY

Dr. Asa Gaston DeLoach, Atlanta; member; University of Georgia School of Medicine, Augusta, 1906; aged 63; died March 15, 1944, in a private hospital. He was born in Liberty County. His forefathers were American and Huguenot ancestry. He received his primary education in the common schools of Liberty County and then attended Emory College at Oxford, Ga. Dr. DeLoach graduated in medicine with honors. He interned at Emory University Hospital. Later he took post-graduate study in New York and Philadelphia and practiced medicine in Atlanta until disabled. Dr. DeLoach studied in New York and Philadelphia. He served in the Medical Corps of the U. S. Army during World War I. He was a member of the Fulton County Medical Society, F. & A. M., president of the Sons of the American Revolution, member of the American Legion and the All Saints Episcopal Church. Surviving him are his widow and two sisters, Mrs. Amanda DeLoach Jordan, Wadley, and Mrs. E. E. Moody, Ft. Meade, Fla. Bishop John Moore and Dr. Albert K. Mathews officiated at the funeral services held at Spring Hill. Burial was in West View Cemetery.

Dr. Samuel Andrew Scruggs, Americus; member; Emory University School of Medicine, Emory University, 1914; aged 54; died February 26, 1944. He was a native of Lauderdale, Miss. Dr. Scruggs received his collegiate education at the University of Alabama before he studied medicine. In addition to being a li-

censed medical doctor, he graduated in pharmacy before he studied medicine. He began the practice of medicine at Green Cove Springs, Fla. After six years of general practice he took post-graduate study of diseases of the eye, ear, nose and throat in Chicago. Later his practice was limited to the eye, ear, nose and throat. He practiced in Jacksonville and St. Augustine, Fla., until he moved to Americus in 1932. Dr. Scruggs was a member of the Sumter County Medical Society, American Legion, veteran of World War I, and member of the First Methodist Church. Surviving him are his widow, one daughter, Mrs. Harold S. Andrews, Miami, Fla., one son, S. A. Scruggs, Jr., who is a pharmacist in the U. S. Navy, stationed at the Marine Air Base Hospital, Cherry Point, N. C. Rev. Mack Anthony officiated at the funeral services held at the First Methodist Church. Burial was in Oak Grove Cemetery in Americus. Members of the Kiwanis Club and Sumter County Medical Society were honorary pallbearers.

Dr. Bland P. Short, Newton; Baltimore University School of Medicine, Baltimore, Md., 1892, died February 28, 1944. He had an extensive practice and many personal friends. Rev. W. W. Taylor and Rev. R. H. Forrester conducted the funeral services at the home of his son, R. B. Short. Burial was in Newton Cemetery.

Dr. John Patterson Timmerman, Hephzibah; University of Georgia School of Medicine, Augusta, 1904; aged 69; died February 25, 1944. He was well known in that community and a good citizen. Rev. T. R. Maxwell officiated at the funeral services conducted at the Elliott Sons Funeral Home. Interment was in Hephzibah Cemetery.

Dr. George Twiggs Miller, Macon; member; University of Georgia School of Medicine, Augusta, 1877; aged 91; died March 17, 1944, at a private hospital in Macon. He was born at Ardis, Beach Island, S. C. Practiced medicine in Americus and Macon since he graduated until disabled. While he lived in Americus, he served on the city board of education and as chairman of the board. Dr. Miller was one of the oldest doctors in middle Georgia. Surviving him are one daughter, Mrs. Andrew Lyndon, Macon; three sons, A. Lawton Miller, Atlanta; Charles C. Miller, Shelby, N. C.; and Righton B. Miller, Honolulu. Dr. Ed F. Cook officiated at the funeral services conducted from Chapel of Hart's Mortuary. Interment was in Riverside Cemetery.

Dr. Albert Alonzo Davidson, Augusta; member; University of Nashville Medical Department, Nashville, Tenn., 1893; aged 71; died March 19, 1944, at the University Hospital, Augusta, after a long illness. He came from a family of physicians. His grandfather, Paul Davidson, came from the New England States and studied medicine at the University of Georgia School of Medicine; when graduated in medicine he practiced in Taliaferro County during his entire professional career. His father, Arthur Chase Davidson, graduated from the University of Georgia School of Medicine and spent the remainder of his life practicing medicine at Sharon. Dr. Davidson practiced a half century at Augusta.

He was ever zealous in his study to keep abreast of all new developments in medicine. He took post-graduate study at the New York Polyclinic Medical School and Hospital, at the Massachusetts General Hospital, Boston, and at the Harvard Medical School, Boston. Dr. Davidson served as assistant professor of surgery in the University of Georgia School of Medicine, assistant professor of physiology, was one time professor of medicine. He was a member of the Richmond County Medical Society, American Medical Association and St. John Methodist Church. Rev. Paul A. Turner officiated at the funeral services conducted from the St. John Methodist Church. Burial was in Westover Memorial Cemetery.

Dr. Zebulon Vance Johnston, Calhoun; member; Atlanta College of Physicians and Surgeons, Atlanta, 1910; aged 61; died March 13, 1944. He was born near Hayesville, N. C. He attended grammar and high school at Asheville, N. C., then later entered Young Harris College and graduated from that institution in 1905. He entered medical school at the next term. After he graduated in medicine, he began practice at Jay, Florida, then moved to Milton, Florida. While in Florida Dr. Johnston helped to organize and was the first commanding officer of the medical detachment of the Florida National Guards. In World War I, Dr. Johnston volunteered to serve as first lieutenant in the medical corps stationed at Camp Johnson, Jacksonville, Florida, was later removed to Camp Wheeler at Macon, until he went with the 82nd Division to France and promoted to Captain in the medical corps. After practicing medicine for a few years in Florida after World War I, he moved to Calhoun. In 1935, in cooperation with Dr. W. D. Hall, Calhoun, he established the Johnston-Hall Hospital, which has rendered valuable service to the people of that section. Dr. Johnston served as Vice-Councilor, Councilor and chairman of the Council of the Medical Association of Georgia from 1937 until his death. He was a member of the Gordon County Medical Society, Calhoun Rotary Club and the First Methodist Church. He was a loyal and valuable citizen. Surviving him are his widow, three sons, Corporal Z. V. Johnston, Jr., of the Army Air Corps in Panama Canal Zone; James T. and Thomas E. Johnston, Calhoun. One daughter, Mrs. Van Watts, of Calhoun. Rev. S. D. Cherry, of Atlanta, assisted by Rev. H. L. Wood and Rev. H. E. Holland officiated at the funeral services conducted from the First Methodist Church. Interment was in Fain Cemetery.

George Fred Klugh, Jr., Atlanta; member; Emory University School of Medicine, Emory University, 1932; died March 15, 1944, at Brunswick. He was planning to open an office in Brunswick to help relieve an acute shortage of physicians there. Dr. Klugh was a graduate of Clemson College, a member of the Fulton County Medical Society, Fellow of the American Medical Association, member of the S. A. E., Phi Chi, Caduceus fraternities, and St. Mark Methodist Church. He served as First Lieutenant in the Medical Corps of the U. S. Army from December, 1940, to June, 1941. He was active on the staff of the Good Samaritan Clinic for several years. Dr. Klugh had a pleasing personality, made

and retained friends easily. He was making a brilliant career which was cut short by his untimely death. In the death of Dr Klugh the State and nation suffered an inestimable loss. Surviving him are his widow, two daughters, Nancy and Susan Klugh; his father and mother, Dr. and Mrs. George F. Klugh, Atlanta; one sister, Mrs. Duncan L. McRae, Burial was in Greenwood, S. C.

WANTED — TWO PHYSICIANS — Graduate Class A medical school, for Milledgeville State Hospital, Milledgeville, Georgia. Address inquiries to Dr. Y. H. Yarbrough, Superintendent.

PHONE 2-0619

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Members of the Woman's Auxiliary to the Georgia Medical Society will collect medical supplies and discarded surgical instruments for the Medical & Surgical Relief Committee of America at the four-day meeting of the Medical Association of Georgia which will be held May 9-12, 1944, at Savannah.

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THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL ASSOCIATION OF GEORGIA
PUBLISHED MONTHLY under direction of the Council

VOL. XXXIII

Atlanta, Georgia, May, 1944

Number 5

MEDICAL PROBLEMS OF TODAY

WILLIAM ARTHUR SELMAN, M.D.
Atlanta

First, let me tell you that two years ago this Association paid me the greatest honor of my professional life. It was then that I became your President-Elect; and a year later I was duly installed as your President. During these two busy years I have attempted to uphold the high standard of leadership set by my distinguished predecessors; and have, with the counsel and assistance of my confreres, carried on to the best of my ability the work of the Association.

True, restriction on travel, and increased responsibilities at home due to the scarcity of physicians, hampered my visits to some areas of the State. Regardless of these inconveniences, I managed to attend many medical meetings, and a few meetings for laymen as well. However little I have contributed to the work of this Association, I have received an hundred-fold in return. To have known each of you more intimately, and to have had the privilege of working with you, has been one of the great pleasures of my life. I thank you.

There are many problems that confront us today: problems of war, problems of citizenship, and problems of a profession such as ours. Never before, since the Declaration of Independence on July 4, 1776, have our lives been threatened by such deadly enemies; and never before has our age-old profession been subjected to such critical analysis. In this wartorn world of today it is but natural that we turn our thoughts to the principles upon which our government was founded, principles for which we have fought in other wars to

maintain, and principles which have made us what we are.

When the Declaration of Independence was first read before the representatives of the thirteen United Colonies of America, its preamble stated: "We hold these truths to be self-evident that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty and the pursuit of happiness." On-and-on this inspired document goes, telling in detail why it is a right, a duty, and a necessity to support this declaration "with a firm reliance on the protection of Divine Providence." It has been "these truths" and our trust in a Divine Providence that made us a great people, and a great nation: these, with the willingness to work, always will foster the proper development of a people and a nation.

"These truths" have been brought face-to-face to every American citizen of today as forcibly as they were in 1776! We are at war again. Our lives and our liberties are being assailed daily by our foes, and this will continue until they are defeated. What has been our reaction in this war? Have we been willing to defend our structure of government, a "government of the people, by the people, and for the people?" The answer is "yes," a most emphatic yes.

Necessarily, the successes of our Army and Navy depend largely on the support of our people at home. In the beginning of the present conflict many of us who were not trained in the School of War wondered what we could do to help win this war. Fortunately, we did not have to wait long for a decision: the path of duty was marked plain. Opportunities for service to our beloved country have been unfolded daily. Appeals by our government have been made and met promptly by the people. Victory

loans for the furtherance of the war effort have been oversubscribed. The American Red Cross appealed for money and blood, and got both. Many other organizations have contributed to the all-out effort to win the war. Young and old people alike are working overtime to fill the essential jobs at home, many of which were vacated by the young men and women who have gone away to fight our battles.

It is with pride that I recount some of the activities of the medical profession in this World War II. Sensing the trends of war, the American Medical Association, through its Committee on Medical Preparedness, worked out a plan to furnish physicians for the armed forces. With the advent of the war, the staffs of the Army and Navy accepted the plan and the Central Committee for the Procurement and Assignment of Physicians, Dentists and Veterinarians was organized and offices for its use were opened in the nation's capital. Following the plan of the American Medical Association, this committee appointed committees for each state and the insular possessions of the United States. The state committees appointed county committees, and soon the work of procuring physicians for the armed forces was begun. These committees, working together in harmony and as one unit, have justified the faith of our government in the plan: primarily a medical plan by medical men.

The physicians who were privileged to join our armed forces have left their homes and loved ones, and many of them left lucrative practices. But these physicians are Americans. They have gone away to help win the war; and in the peace that will surely come they will have the satisfaction of knowing that they upheld their country in a time when they were most needed. Georgia has furnished her full share of physicians and will continue to do so as long as the war lasts.

In the work of the procurement and assignment of physicians, it may be stated that Georgia has at this time one physician to every 1409 persons. The safe ratio of physicians to population has been estimated to be one physician for every 1500 persons.

Unfortunately, there are many places in our State, particularly in the rural areas, where there is one physician to 3,000 persons. During the past year approximately 60 Georgia physicians died, a few became incapacitated for active work and others may soon break down under the strenuous work they are now doing. Seventy-five per cent of the recent graduates in medicine have been accepted for duty with the armed forces. With these facts before us and with no prospects of immediate favorable changes either for manpower in physicians or in the production of more graduates from the medical schools, each of us should conserve our strength as best we can. At the same time we should encourage our patients to help us in our problem of serving best the most people.

Georgia had her medical problems before the war. With one-third of her population Negroes, with too few Negro physicians, with too many of her white people in the low-income group, with too few hospitals in the rural areas of the State, and with too few county public health units, one begins to wonder why morbidity and mortality rates are not higher in our State. Let us not forget that all of these problems are our responsibility. The war, and the prosperity period that goes with a war, will not solve them. Recently charity hospitals have had more vacant beds than ever before, while private hospitals cannot meet the demands made on them for beds. Such trend is encouraging to medical men because we believe it shows that the majority of our people are interested in good health. At the same time we must know that the majority of our people, rich and poor alike, know little about health problems, and that we must continue our health education program to the end they will know how to protect all the people against the spread of disease. Let us not forget that many of our people, particularly the Negroes, prepare a large per cent of our food, launder much of our clothing, and nurse many of our children. Such close contacts as these always will be conducive to the spread of certain diseases.

The facts are: With the coming of the

war and with the everchanging population, both old and new health problems have demanded our concerted efforts. The numerous committees of this Association have worked long and tirelessly to solve some of them. Our State Board of Health, which is made up largely of members of our Association, has assumed new duties: every new Army or Navy reservation in the State brings new people into new communities where new sanitary facilities must be provided to prevent the spread of disease. At the same time the board and its too few employees have done extra routine work, such as serologic examinations, examinations for malaria, tuberculosis, venereal disease, rabies, hookworm and diphtheria. Examinations for the rarer diseases such as undulant fever, typhus fever, typhoid fever, Rocky Mountain spotted fever and tularemia are also available at the several State Board of Health laboratories throughout the State. To the prophylaxis and treatment of some of these and other diseases the State and Federal governments lend support in the appropriation of funds.

The slogan, "Early Cancer Can Be Cured," has borne fruit. Through constant education of the people by the Cancer Commission of this Association, with the cooperation of individual physicians and the Women's Field Army of the American Society for the Control of Cancer, patients with cancer or suspected cancer have been brought to the several cancer clinics throughout the State, or to physicians' offices, and many of them have received prompt and adequate solution of their cancer, or so-called cancer problems. The Georgia Legislature has taken, at the request of this Association, proper cognizance of the cancer problem by appropriating funds to be used for the medical and hospital care of indigent patients who have this disease.

Our Tuberculosis Committee has long labored to call attention to the early symptoms of that "champion of death" in early adult life: tuberculosis. In recent years the routine use of x-ray examinations of the chests of school children, and proper examinations of all undernourished and anemic children, have kept the mortality rate of

this troublesome disease on the downgrade.

"Don't Purge in Appendicitis" has become the slogan of our Committee on Appendicitis, and this slogan has helped materially in educating our people to seek early medical care for this disease which remains too common. The success of the committee's work, through an educational campaign for the physicians and the public, has again justified our claim that all people are entitled to health education. Such education would probably be more effective if it could be made a compulsory subject of the public school system.

Our Committee on Maternal Mortality and Infant Deaths has done more to create interest among obstetricians and prospective mothers than has all the printed literature of all time. Skillful prenatal and postnatal care have been some of the important links that have lengthened the average span of life.

Our Advisory Committee to the Woman's Auxiliary of the Association has done much work for the promotion of good health. Through the work of this committee, and the work being done largely by physicians' wives, health education has been carried to the public. Visual health education films have been shown to thousands of people throughout the State, particularly to school children. One year more than 358,000 of our people were privileged to see these films, but necessarily some of this work had to be curtailed for the period of the war, since transportation facilities are no longer available.

Many other committees of this Association are busily engaged in the promotion of good health. Some of these activities include a study of the economic and educational systems of the present time, and some of them look towards the postwar period when again we must face "normal times" and begin anew our efforts to furnish to the public the best medical care available in such times. Such problems bring me now to a brief consideration of the Wagner-Murray-Dingell bill which was proposed in the Congress of the United States during the past year, and which may, should it become law, change to a large extent our sys-

tem of medical care. I shall not attempt to give you all the details of this voluminous proposal, a bill of almost one hundred printed pages. Each of you can obtain a copy of an analysis of the bill at the Registration Desk at this annual session of the Association, an analysis which is complete as to details. What I desire to say to you now is this: This bill proposes to regiment the medical profession of today and is, in my opinion, un-American. If such a bill becomes law it will take away from our profession some of the "truths" in the Declaration of Independence and will probably destroy the initiative which has made our profession a great profession. Its proposals may look good to many people, but many of those same people must realize that under our present system of government and under the medical care they have received all of these years, they have enjoyed privileges and benefits which they could not obtain under any other system. It is the duty of our profession to defeat the enactment of this bill into law, and it is our duty to continue to work to the end that medical progress will continue for the benefit of all the people.

Much of the cry for the socialization of medicine has been centered around the needs of the so-called indigent group. May I remind you that in Georgia we have, under the Constitution of our State, the right to levy taxes for the medical and hospital care of these people? Our counties can, through this authority, levy taxes to defray the expense of such care. This authority was proposed by the Committee on Public Policy and Legislation of this Association. Would it not be better if each community of our State made an effort to solve its own medical problems? And in the solving of such problems, would it not be better if the citizens of such communities sought the advice and aid of their physicians and our State Board of Health so that an adequate health program could be formulated and put into operation?

Physicians must have proper equipment with which to work. One does not need a large hospital or a clinic to do good work. Small units — what I like to call medical

centers — could be built in each county of the State, particularly in the rural areas, and would serve a most useful purpose in routine medical care. The citizens of those communities can, in most instances, afford such units. Their work could be correlated with the activities of the county health departments under the supervision of county medical societies and the State Board of Health, and all could cooperate for better health programs for each community. Such units, with their modern facilities, would attract young, well-trained physicians who would locate in those communities and carry on the work of good medical practice, and good health programs. Such a plan, in my opinion, would be most effective for good medical care and good public health programs, and would place the responsibility for medical and hospital care, and public health supervision, where it belongs: on the community. Here may I remind you that medical and hospital care, and public health, are not unlike certain other of our activities in American life: our educational system and our American way of living are community problems. True, our educational system has been fostered and aided by the State but not to the point of complete supervision. The State will give aid in certain public health programs, but would it be right for the State to assume full responsibility for the medical and hospital care of all the people? One cannot circumvent so-called local responsibility. We must, therefore, work to preserve our American way of life.

In conclusion, I desire to commend the physicians of Georgia for their patriotism. Those of young years have gone away to serve their comrades in arms, and those of mature years have remained at home and quickened their steps to minister to the medical needs of our people. Surely all of them will continue to do their part in preserving our American way of life. May God grant an early "peace on earth and good will toward men." And may all of us — the members of this Association — gather again at our annual sessions and discuss those medical problems which will be in the interest of all the people.

THE MANAGEMENT OF HYPER- THYROIDISM

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Although the ultimate cause of hyperthyroidism is still unknown, its diagnosis by the general practitioner in its typical form is relatively easy. There are, to be sure, many cases of so-called "masked hyperthyroidism" whose diagnosis may present some difficulty, but the extremely nervous patient, with a rapid pulse, the eye signs, a progressive loss of weight, the smooth skin, and tremor is familiar to almost everyone.

The management of these cases, however, often presents problems of great difficulty, and should be intrusted only to those capable of rendering competent treatment.

I make this statement because it is frequently impossible to predict with accuracy a patient's response to treatment and, as Dr. Lahey has so wisely said, technical errors are paid for at a high price.

For some strange reason many general practitioners are unable to resist the temptation to try these patients on iodine. And in the experience of most surgeons, it is only the occasional patient who has not had previous iodine therapy. It is the indiscriminate use of this drug that I should like to condemn. The physician can make no greater error than to prescribe this drug indiscriminately to his goiter patients. All too frequently the surgeon is confronted by a patient who has been given 10 drops of Lugol's solution and a high caloric diet by a well meaning internist, reassured and sent home to rest in bed. A few weeks pass, the procedure is repeated, and the physician is delighted at the remarkable improvement he has wrought. For behold, the basal metabolic rate has dropped dramatically, the patient has gained weight, the pulse rate has fallen from 140 to 80 or 90; the patient looks better, feels better, and everyone is delighted that she has been spared the tortures of surgery. But in a few weeks or months this patient returns for another

of these amazing treatments. All her symptoms have returned. The iodine is repeated, the dosage doubled; but the heart continues to race. She is hospitalized, given massive doses of iodine (often by vein) but somehow the physician has lost his magic touch. When he repeats the basal test and finds it essentially at its original level, he throws up his hands in despair, loads the patient on the train, and ships her to the city, convinced only now that she has become a candidate for surgery. It is only when you are forced to operate on a patient who has become iodine-fast, with a basal rate of 50 plus, a pulse rate of about 140, a progressive weight loss, and a heart that is fibrillating, can you understand why the surgeon begs you not to give iodine indiscriminately.

The treatment of hyperthyroidism is surgical, *not medical*; except in a few instances of mild adolescent hyperthyroidism, and possibly in certain instances of recurrent hyperthyroidism. Why? Simply because we have no specific drug to cure the condition. The use of x-ray therapy is of limited value; proper surgery, however, gives a low mortality, a low incidence of postoperative complications, and a high percentage of satisfactory end results.

Preoperative Preparation

The preoperative preparation may be broadly covered by iodine, rest and sedation, and diet.

Iodine. It is in preparing these patients for surgery that iodine finds its greatest usefulness. This is universally admitted. In conjunction with absolute bed rest, sedation and proper diet, iodine, since its reintroduction by Plummer, has enabled many cases previously considered inoperable, to receive the benefits of surgery.

The dosage of iodine generally prescribed is from 10 to 30 drops of Lugol's solution three times daily. Theoretically, this dosage is in excess of the organic iodine the gland can utilize, but clinically these amounts, and even more, are often required. The patient will usually exhibit his maximum response from the tenth to fourteenth day, but this is by no means a rule. It is well known that there is a great individual variation in the response of

cases to iodine therapy. One writer states that "38 per cent of the cases of toxic-adenoma may be made worse by iodine, and a considerably larger number show no effect." About 2 per cent of the patients receiving iodine develop a severe febrile reaction to the drug. A great deal will depend upon whether or not the patient has previously had iodine, the presence or absence of foci infection, and the ability to obtain physical and mental rest.

Rest and Sedation. Rest must be both physical and mental. Hospitalization must be insisted upon. Visitors must be few and very carefully selected. Nine laymen out of ten believe that there are only two kinds of goiter: "inward goiter" and "outward goiter." The inward type is supposed to be the worst kind, and the average person holds many fantastic ideas as to what the results of surgery are. Preoperative surgical patients must be protected from these people. The reading of exciting stories must be prohibited. Sedation can usually be obtained by the use of the barbiturates. Phenobarbital in doses of $1\frac{1}{2}$ to $11\frac{1}{2}$ grains three times daily will usually accomplish this, but the dosage should be sufficient to insure restful sleep at night, and freedom from apprehension during the day. An occasional idiosyncrasy to the drug will be encountered and then other sedatives must be substituted.

Diet. The diet should contain at least 4,000 calories for the 24-hour day, the greater portion of which should be derived from carbohydrate. These patients often have ravenous appetites. I operated on a school teacher recently, aged 27, who stated that at mealtime she would consume as much food as any three other people at the table. Between meals she would eat either a box of candy, or a large layer-cake. Nevertheless, she had lost forty pounds in some four and one-half months.

Specific complications must be treated with the proper drugs. Unless there is evidence of heart failure, digitalis is not now thought to be of any special value in these patients. An article appeared last year in which the use of estrogenic hormones was stated to influence favorably the operative course of these patients, but I have had no

experience in this connection. The B complex has been shown to be of definite value in hyperthyroidism, and a potent product of this preparation should be prescribed daily.

Management of the patient who is already receiving iodine is a constantly recurring problem. In these cases it is best to continue the use of iodine for a period of fourteen days. If at the end of this time no improvement is noted the drug is discontinued with the knowledge that an exacerbation of symptoms may occur for the first week or so. Large doses of sedatives should be used during this period. After six to eight weeks iodine should be used again and usually enough improvement will be seen to proceed with surgery. The use of two (or more) stage operations will result in a considerable improvement in the surgeon's mortality rate.

The decision as to the proper time for surgery can generally be made from a careful evaluation of the weight, the pulse rate, the basal rate, and the general appearance of the patient. When a favorable response is obtained to treatment, the pulse rate will fall gradually to 80 or 90, there will be a gain in weight, the basal rate will fall to 30 plus or below, and the patient will appear less nervous and less apprehensive. This response can be predicted to occur with a reasonable degree of accuracy between the tenth and fourteenth days in those cases not having had previous iodination. In the remaining cases the surgeon will be forced to rely on his judgment as to when the patient has reached the limit of his or her ability to improve. The failure of a patient to gain weight is regarded as a grave prognostic sign.

In the choice of an anesthetic, the surgeon can be allowed some leeway. The use of any prolonged inhalation anesthetic involves considerable risk and should not be used because of the varying amount of liver damage always present in these patients. Combinations of anesthetics, I believe, are superior to any single anesthetic now in use. I prefer the use of Avertin (although I am aware that its use is criticized by some) with local infiltration of 1 per cent novocaine, and the supplemental administration of gas and oxygen when needed.

With this combination a very flexible anesthetic is possible that can be adjusted to each patient. Ether should not be used alone because of the possibility of liver damage. Cyclopropane would appear to be an ideal anesthetic in view of the fact that it is given with such high oxygen concentration. But its tendency toward congestion and increased hemorrhage makes it unsatisfactory. I have used ethylene in a few instances and found it satisfactory.

The actual technical procedure for thyroid surgery will not be discussed in detail, but emphasis will be given certain important aspects of the operation. The incision should be carefully located, and should vary with the type of patient. Any method which places the incision a given number of finger-breadths above the suprasternal notch, will be too high for the patient with a short neck, and too low for long neck subjects. I have found it helpful to lay out the proposed incision by pressing a piece of silk stretched tightly between the two thumbs into the skin of the neck for a few seconds. This leaves a faint indentation on the skin which can be followed easily with the knife. It is necessary to undermine the skin as high as the notch of the thyroid cartilage in order to obtain adequate exposure for isolating the superior thyroid arteries. In the majority of cases adequate exposure can be obtained without cutting the ribbon muscles, although as Dr. Lahey has preached for years, it does no harm. The muscles heal promptly provided they are severed high enough to preserve their nerve supply. In very large glands, or where any difficulty in obtaining exposure is experienced, they should be unhesitatingly severed.

All the thyroid arteries should be ligated after careful isolation, before resection of the gland is attempted. It is important that the vessels be cleanly dissected to prevent the knot from slipping during a fit of postoperative coughing or vomiting.

The previously decided upon amount of gland tissue should then be removed by the clamping of numerous small bits of tissue to insure adequate hemostasis. I use the term "previously decided upon amount of gland tissue" because I feel the surgeon

should have, in most cases, made this decision before entering the operating room from his observation of the patient during the preoperative period. Mass ligatures have no place in a carefully performed thyroidectomy. Each bit of clamped tissue should be tied separately and carefully.

The tendency today is to remove larger and larger amounts of tissue, choosing to risk a mild hypothyroidism rather than chance of recurrence of the disease. At the completion of the operation, the trachea should be bare, and only two small masses of thyroid tissue, snugly compressed, should remain.

I definitely prefer silk as a suture material and I have found nothing better than the fine gage, manufactured by Deknata, especially for thyroid surgery. In my hands it gives much less tissue reaction and serum formation than does catgut, and I seldom find it necessary to insert a drain.

In closing the wound no attempt is made to reapproximate the platysma. Skin clips are routine. If skin clips are used, it is absolutely necessary to know when to remove them, if unsightly scars are to be avoided. Half of the clips can be removed in 24 hours and the remainder in 48, in nearly every case.

Postoperatively, the patient is placed in the sitting position and given running doses of morphine for the control of pain. Liquids are allowed by mouth immediately and food is given as soon as it is tolerated. A tracheotomy set should be kept in the room. Only the occasional patient will require less than 4,000 to 5,000 cc. of fluid during the first 24 hours. This may be administered by proctoclysis, using the continuous drip; subcutaneously or intravenously. Iodine must be given in abundance. It may be given by proctoclysis, 60 drops to the pint; intravenously in the form of sodium iodine, or by mouth if tolerated. The oxygen tent is of great value, particularly in those patients operated upon during the summer months.

A few words about the more serious complications following surgery are in order.

A. "*The crisis*" is usually the result of improper preparation. There is gen-

eral agreement upon the treatment which consists mainly of placing the patient in an oxygen tent, giving morphine up to $\frac{1}{2}$ grain hypodermically, sodium iodide intravenously, and continuous fluids rich in glucose.

B. *Tetany* in a mild form may develop in a few days following the operation. Calcium and diet will control the mild cases; parathormone should be reserved for the severe ones.

C. *Injury to the laryngeal nerves.* Laryngoscopy should precede all operations on the thyroid gland. This will enable the surgeon to properly evaluate postoperative phenomena. In unilateral paralysis, the hoarseness often disappears spontaneously due to the ability of the normal cord to approximate itself to the injured one. In bilateral paralysis the voice may not be lost, but dyspnea occurs on exertion, and an operation to free or anastomose the nerves should be attempted.

D. *Recurrent hyperthyroidism*, or persistent hyperthyroidism, is due to the failure to remove sufficient quantities of thyroid tissue. Fortunately, most of these patients can be adequately controlled on small doses of iodine alone. It is in these cases that x-ray therapy may be of great value. If iodine and x-ray fail to cause a permanent remission, a second operation should be advised.

In closing I should like to insist that the physician be constantly on the lookout for so-called "masked hyperthyroidism." Any patient who manifests auricular fibrillation, either paroxysmal or permanent, or cardiac failure without obvious cause, should be considered a candidate for this condition. The enlargement of the thyroid gland may be so slight as to escape detection. It is often only after a basal rate is obtained that the true nature of the condition asserts itself. It is of utmost importance that these conditions be recognized early and treated effectively, for results can be obtained which cannot be matched in any other form of heart disease.

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FRACTURE OF FEMORAL NECK AND TROCHANTER

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Atlanta

For a number of years the Smith-Petersen nail has been used for internal fixation of fractured femoral necks revolutionizing and simplifying the care of this dreaded

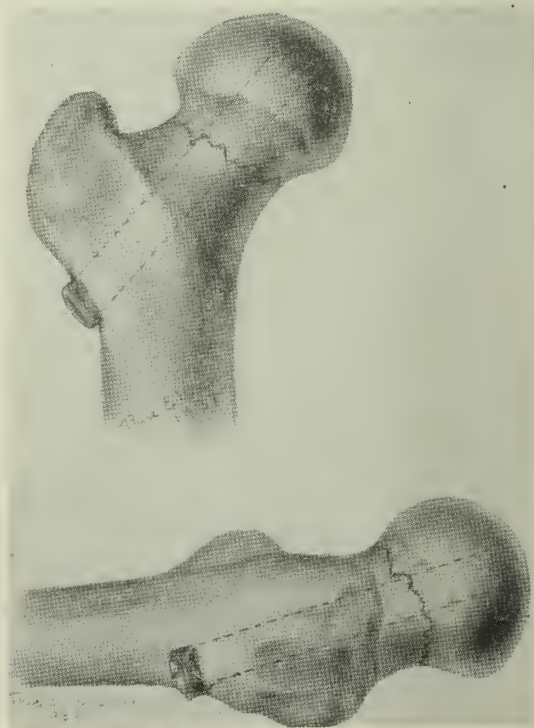


FIGURE 1
Fracture of femoral neck. Smith-Petersen nail internal fixation.

Read before the Medical Association of Georgia, Atlanta, May 13, 1943.



FIGURE 2-a
Intertrochanteric fracture.

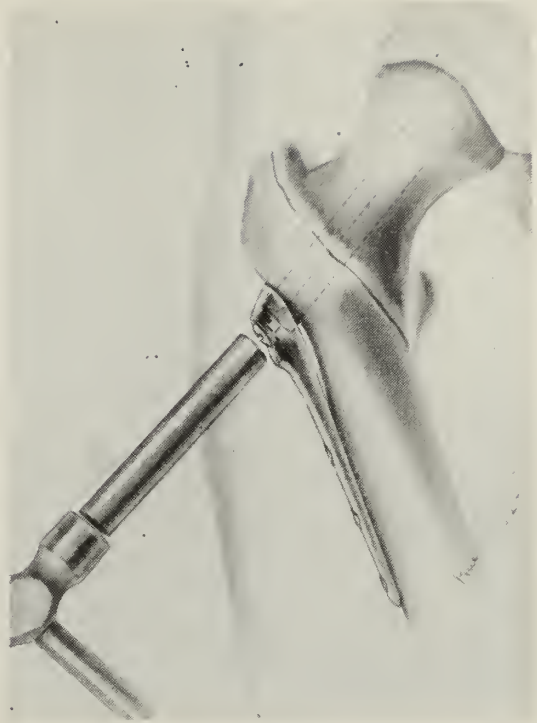


FIGURE 2-c
By means of a steel rod and hammer the nail is driven until the attached plate comes in contact with the lateral surface of the femur.

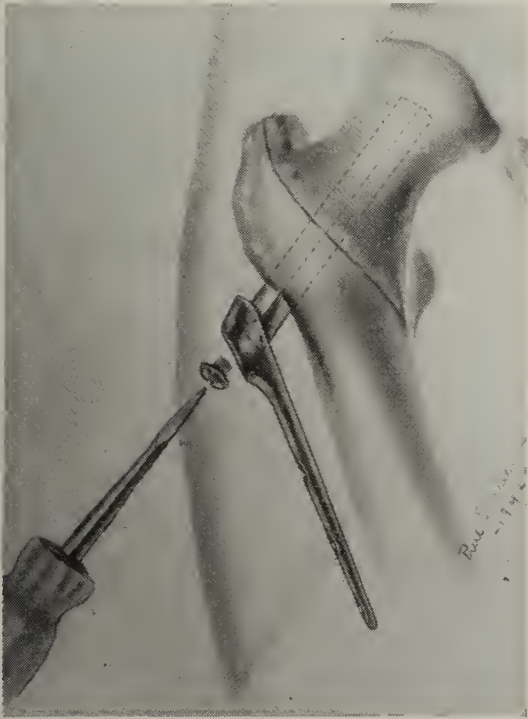


FIGURE 2-b
Before the nail is completely driven into place, the plate is attached by means of a screw which is forcibly turned with a large substantial screwdriver. None of these screws has ever come loose in my experience of several hundred cases.

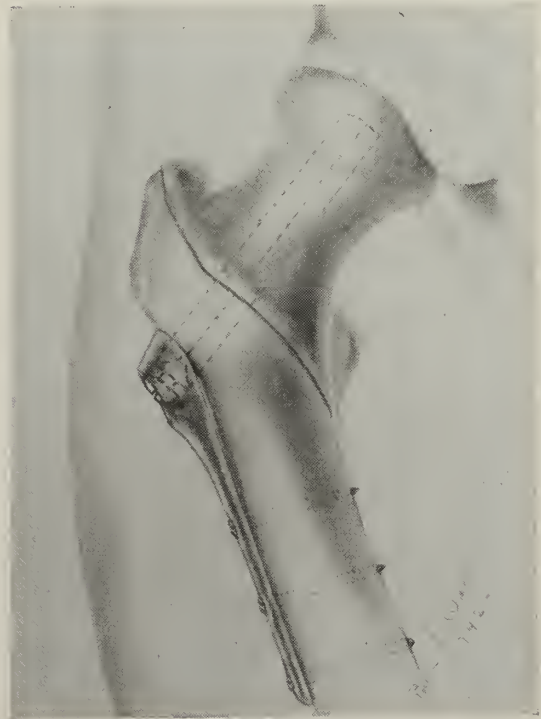


FIGURE 2-d
Three long screws fastened to the shaft of the femur.

accident that occurs so often to the aged.

The success of this procedure depends

upon several factors: accurate setting of the fracture, accurate placing of the nail, and postoperative protection from weight-

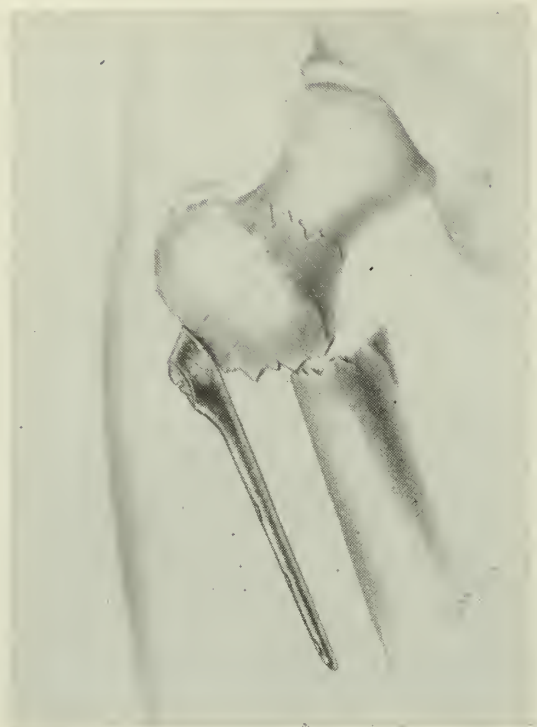


FIGURE 3-a
Subtrochanteric fractures. Application of nail and plate in treatment of subtrochanteric fracture.

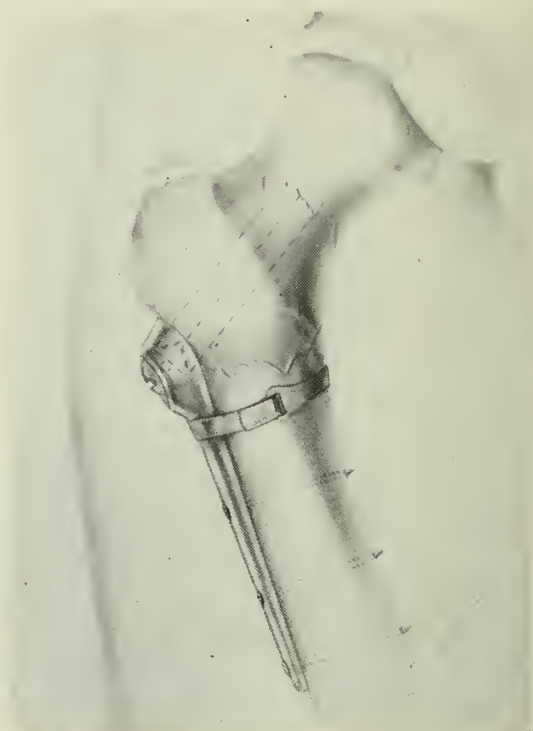


FIGURE 3-b
The shaft of the bone is fixed to the plate by three long screws. Sometimes a Parham hand may be placed about the shaft of the femur and the plate for additional security, but this is rarely necessary.



FIGURE 4-a
Nonunion of fractured femoral neck.

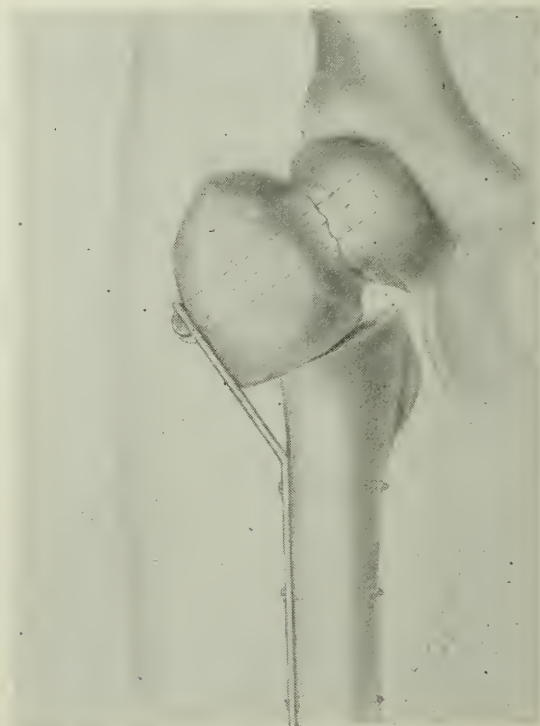


FIGURE 4-b
Internal fixation by means of nail and plate with Schanz osteotomy.

bearing until union and reconstruction of the devitalized femoral head have been completed. In 1935 the author devised a method of attaching a Lane plate to the end of the Smith-Petersen nail for internal fixa-

tion of trochanteric and subtrochanteric fractures. This device has been as useful in trochanteric fractures as the nail is in

femoral neck fractures and is used by the author routinely in all trochanteric fractures.

Before the day of internal fixation of fractures of the femoral neck, nonunion occurred in 50 per cent or more of cases treated by various methods and, as stated above, those cases that are inaccurately set and inaccurately nailed or those in which there is too early weight-bearing, nonunion may be expected. For many years the Albee bone graft has been effectively employed in the treatment of such nonunions and is an excellent procedure, especially for the younger patients — those under the age of fifty.

In cases of nonunion in those old people whose condition would make the minimum of anesthesia and of surgery imperative and who would not tolerate postoperative plaster spica cast immobilization, the Schanz osteotomy plus internal fixation with the nail and plate is the operation of choice. This procedure disregards anatomic replacement for the sake of an almost sure and safe method of getting union and a weight-bearing leg. In those cases where for any reason nonunion seems to be inevitable, union may be salvaged by use of small peg-like grafts placed parallel to the Smith-Petersen nail. By means of a simple gadget attached to the end of the nail, these 3/16 inch size grafts can be accurately and quickly placed across the fracture line materially increasing the chances for success.

WOMEN STUDENTS IN MEDICAL SCHOOLS

The British correspondent of *The Journal of the American Medical Association*, in the April 15 issue, reports a changing point of view regarding women medical students in Great Britain. He says:

"In London there are twelve medical schools; one school admits only women students, two take a small proportion of women and the remaining nine have expressed inability to take women.

"The war has produced an increasing demand for women doctors, and thus again brings up the subject of greater facilities for the medical education of women. . . . The minister of health has declared himself unable to press acceptance of women on medical schools. . . . The senate of London University appointed a highly authoritative committee to report on the desirability of providing facilities for the medical education of women. Six of the seven members of the committee recommended the opening of all London medical schools to women on terms of equality with men. By an overwhelming majority the senate approved this. The *Times* states that as a result all the nine schools which now exclude women will probably admit them. . . ."

THE TREATMENT OF DEEP BURNS AND CONTRACTURES

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Atlanta

In time of war there is probably no more important subject for consideration than the study of burns. Sixty per cent of the casualties at Pearl Harbor resulted from burns. The report of the National Safety Council for 1942¹ states that deaths from burns were up 17 per cent. After excluding the Boston night club fire, the general trend of fatalities from burns was up approximately 10 per cent. Burns now occupy third place as a causative factor in the production of accidental deaths in this country. More than 8,000 lives are lost annually in the United States as the result of burns.

A great many papers have been written in the last few years on burns, most of which have dealt with the immediate treatment of burns. I wish to discuss the treatment needed after the patient has survived the initial shock and toxemia.

It is as important that a severe burn be hospitalized immediately as it is that all compound fractures be hospitalized. It should be remembered that most burns are more severe than they seem at first. Please do not think that I am taking the emphasis off the general treatment when I do not discuss it in detail. If a burn is severe the patient should receive plasma if available, dextrose solution, blood transfusions, maybe adrenal cortex extract and some of the sulfonamides.

The patient's general condition often attracts most of the attention during the early stages of the burn, and not enough attention is paid to the burned area itself. It is just as poor surgical practice to let the burned area become exposed and infected as it would be in doing an abdominal operation, if the patient showed severe shock, to stop and treat the shock and leave the abdominal wound open to secondary infection. It is just as important that the burned area be

¹Read before the Medical Association of Georgia, Atlanta, May 13, 1943.

From the Scottish Rite Hospital for Crippled Children, Decatur.



FIGURE 1

This arm was burned with fire from the shoulder to the tips of the fingers six weeks before admission and was treated with tannic acid. The black eschar of tannic acid was still tightly adherent on admission. The burns on the hand and forearm were superficial but were deeper on upper arm, so that skin grafts were needed between the elbow and shoulder. The contraction of the tannic acid cut off circulation and gave a typical Volkmann's ischemic contracture, with flexion of the wrist, hyperextension of the metacarpo-phalangeal, and flexion of the phalangeal joints. Condition shown is four months after the burn. Even after months of physiotherapy she could not get her thumb to her fingers. It is my belief that this useless hand followed tannic acid treatment rather than the scattered superficial burns.



FIGURE 2

The hand of a twelve year old girl which was burned with fire and treated with tannic acid. The circulation has been lost in all of the fingers. The fingers and thumb all sloughed off leaving a completely useless hand. Photograph was made when first seen six weeks after the burn. One cannot be sure that the mummification of the fingers was not due to the burn, but from the heavy black scab which was removed before the picture was made, it is thought that the contracture of the tannic acid eschar cut off the circulation.

protected from infection and treated with the strictest surgical technic, as it is for a compound fracture or any open wound.



FIGURE 3-a

FIGURE 3-b

A seven year old girl who was burned by fire ten months before admission. Was dressed by family physician at first and later by parents. This badly neglected case lived within 25 miles of the hospital. Months of suffering and contracture of the axilla could have been prevented by early skin-grafting. The denuded area was covered with 180 "small deep grafts of Davis." The arm was separated from the chest by a plastic operation and skin-grafting, and the contracture overcome by means of a plaster jacket, with wedgings of the arm in extension.

Haskins² has listed 75 methods of treating burns locally. The choice of the method is probably no more important than it is that the method chosen be carefully applied.

We should apply the same surgical principles to the treatment of burns that we would to other wounds in the skin. We would hesitate to close surgically a deep punctured wound. Should we not feel the same way about a deep burn, unless we can be sure it has been properly protected and is free from infection? We would not hesitate to close a superficial wound or "brush burn" if seen early, and burns of this degree might be closed with some of the coagulants, like tannic acid.

In treating any deep surgical infection like an abscess, we apply a hot wet dressing. Why should we not apply the same principle to deep burns with infection? Saline or boric dressings or an ointment is better for a deep burn than tannic acid.

An editorial in *The Journal of the Ameri-*

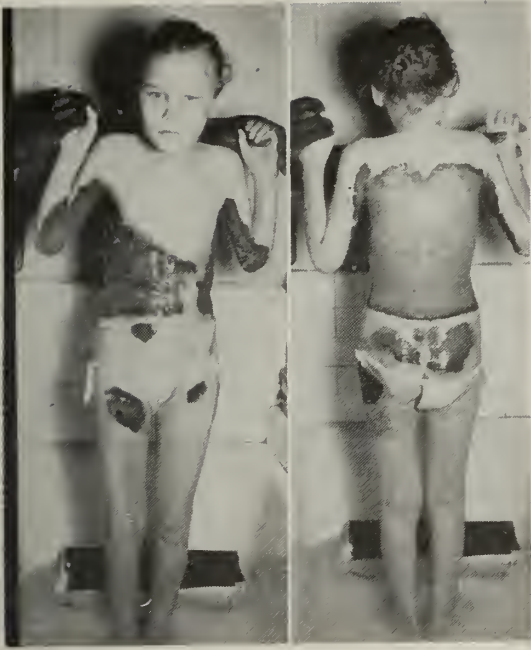


FIGURE 4-a

FIGURE 4-b

A nine year old girl whose clothing caught on fire as she stood in front of an open fire. A and B show condition on admission. The burns involve both axillae and both elbows. The joints were "frozen." She had less than five degrees of motion in shoulders and elbows. Was unable to get either hand to mouth, to feed herself. The burn completely encircled the trunk, except for less than two inches in front. Hips and both thighs burned. Even though she had spent six months in a hospital and had been treated with various antiseptic ointments, she is a grossly neglected case. This patient should have been skingrafted a few weeks after the burn. The infection was cleaned up with daily baths in a tub of hypertonic salt solution and soda (c), and at the same time motion was gradually developed in the joints. The granulating areas were covered with 850 "small deep grafts of Davis" during 8 operations. She had a contracting band of scar tissue in each axilla (d). This was corrected by a "Z" plastic operation on each axilla (e). She had normal range of motion in all joints on dismissal.



FIGURE 4-c

*can Medical Association*³ called attention to the central liver necrosis which followed the use of tannic acid in burns. This destruction of the liver is seen only in the patient treated with tannic acid, and is quite different from that caused by the toxemia of burns and scalds. Wells, Humphrey and Coll¹ have shown that very small amounts of tannic acid injected into rats will produce the same liver necrosis.

Tannic acid should not be used on the face, hands or feet. I have seen the eschar of tannic acid applied to the forearm for a superficial burn, contract and cut off the circulation and give a typical Volkmann's ischemic paralysis and a useless arm (Fig. 1). I have seen similar constrictions cut off the circulation to all the fingers and

thumb of a hand, and have seen them all become gangrenous and drop off, when the original burn involved only one of the surfaces of the fingers (Fig. 2).

Allen and Koch⁵ recommend as the best treatment for burns the immediate application of vaseline gauze and a pressure dressing, using marine sponges very much as we do in dressing a skin graft. This elastic pressure controls capillary oozing, and prevents the loss of tissue fluids. If we had a wound with constant oozing from capillary hemorrhage, we could see the red stain and would apply more pressure to the dressing. They say that it is just as important to stop the "white hemorrhage" which causes the fluid loss after a burn.

This original nonadherent pressure dressing is left on for two weeks. If the burn is superficial, the skin will be healed when the dressing is removed. If the burn is deep, a saline dressing may be applied and the wound will soon be ready for grafting. It may take four weeks to get the tannic

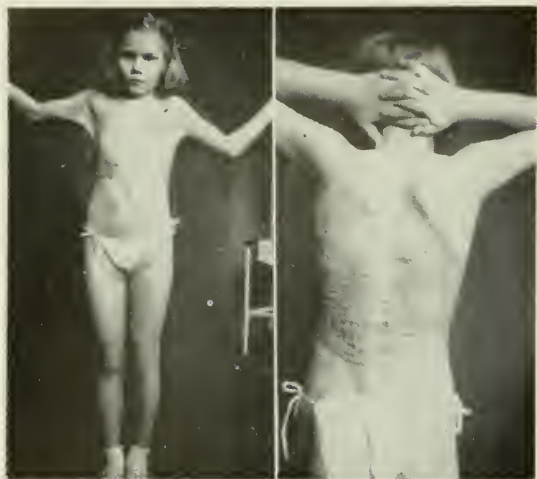


FIGURE 4-d

FIGURE 4-e

acid eschar to separate, and several weeks longer to get the base ready for grafting. By the use of ointment and saline dressings I have been able to skin graft some patients as early as two weeks after the burn.

We are constantly receiving advertisements telling us that some high-priced antiseptic will make extensive burns heal without scar formation. Of course this applies only to superficial burns. When all the elements of the skin are destroyed down to the subcutaneous tissue, there is no medicine known which will make granulation tissue grow epithelium. The fibroblasts and capillaries making up granulation tissue cannot change into epithelial cells. If the granulating area is large, the skin will grow in for about an inch and a half on all sides and will grow no further no matter how long we wait. The longer the subcutaneous tissue is covered by granulation, the denser the scarring becomes. Lyle expressed his opinion on this matter as follows: "To allow a large superficial wound to heal by granulation should be considered a surgical failure. Certainly it is a great economic waste."

One of the chief errors in treating burns is to wait too long to apply skin grafts. It is seldom that grafts are applied too soon or unnecessarily. It has been suggested that any wound which looks like it will require as much as three weeks to heal spontaneously should be grafted.

If the burn involves the flexor surface of



FIGURE 5-a

FIGURE 5-b

A ten year old girl who crawled into the fire when six months old and burned both feet. Walks badly. Unable to wear shoes. Has never gone to school or away from home. The remains of the great toe were buried in the sole. The left foot was completely dislocated and turned over into an extreme flatfoot position. The fifth toe was burned away, and the fourth was drawn up against the lateral border of the leg. The freeing of the great toe on the right was as difficult as correcting the left foot. In addition to plastic surgery on the left, a series of casts and wedgings were required to correct the deformity between the bones of the foot. When seen a year after dismissal she was wearing normal shoes and going barefooted, and was able to pick a hundred pounds of cotton a day, and needed no further treatment.

a joint, this area should be grafted at the earliest possible moment. It is a physiologic principle of scar tissue to contract. No amount of weight that can be tolerated by a patient will permanently prevent contractures. Contractures can be prevented only by applying skin grafts early.

In my early surgical training I had the privilege of working with Staige Davis in Baltimore, and learned his technic for the so-called "small deep grafts." Without doubt these are the best grafts to apply to an infected burned area. This operation can be done under local anesthesia without upsetting an already sick patient. These small deep grafts will grow on infected granulation tissue when other grafts will fail. This is no reason, however, for neglecting to use proper preoperative preparation of the wound. In extensive burns, skin is often at a premium, and one is not justified in sacrificing a pedicle graft or a full thickness graft on infected granulation tissue. If a few of the small deep grafts should be lost, this would be of no consequence. I have frequently covered a granulation area five to six times the size of the

donor area with small deep grafts. I usually apply from a hundred to three hundred grafts at a time, and repeat the procedure each week until the entire area is covered with epithelium. In adults with extensive burns as many as twenty-five hundred grafts may be used.

If the burned area involves the flexor surfaces of a joint, there may be some contraction, even if grafted early, because there will be some scar formation. In these, and the neglected cases which have already healed with contraction when they come to us (Figs. 3, 4 and 5), it will be necessary to lengthen the band of scar tissue by some kind of plastic operation. Often it is necessary to apply a split-thickness or whole-thickness skin graft. Forcible stretching of a contracted joint under an anesthetic should never be done.

Ten or fifteen years ago we used many pedicle grafts, but for the extremities today this uncomfortable method is seldom necessary. Today we have better methods of cutting skin grafts. Without doubt the best method of cutting grafts is by means of the Padgett Dermatome⁴. This machine cuts a large graft very quickly, and cuts it any thickness desired. This apparatus consists of a drum with a knife fixed at a definite distance from the drum. Any size graft may be cut up to the size of the drum, which is four by eight inches. The grafts may be cut from the back, chest, or abdomen, which was not possible before. The technic need not be described here, as it has been fully described elsewhere.

Most of the severe burns of the trunk and extremities present orthopedic problems as well as the problem of epithelization of the burned area. For this reason these patients can best be treated by a plastic surgeon and orthopedic surgeon working together, or by an orthopedist skilled in plastic surgery.

478 Peachtree St., N. E.

5. Allen, Harvey S., and Koch, Sumner, L.: The Treatment of Patients with Severe Burns, Surg., Gynec. & Obst. 74:914 (May) 1942.
6. Padgett, E. C.: Skin Grafting, Springfield, Ill. Charles C. Thomas. 1942.

DISCUSSION ON PAPERS BY DOCTORS PHIL ROBERSON,
LAWSON THORNTON AND J. HIRAM KITE

Dr. J. M. Barnett (Albany): Dr. Thornton is too modest to give due acknowledgment of the wonderful work he is now doing in bone surgery. Like most big men, he gives little recognition to his great accomplishments.

It was my privilege in 1937 to be present at a demonstration he gave at a meeting of the College of Surgeons in Chicago. His time on the program was divided with Dr. Smith-Petersen, but owing to the extensive experience in handling more cases, Dr. Smith-Petersen relinquished the entire time to Dr. Thornton. He gave the assembly a wonderful demonstration in the use of the flanged nail designed by Dr. Smith-Petersen. During the course of the demonstration I had the privilege of sitting between two of the greatest bone surgeons in this country: one an advocate of metal in reconstruction bone work; the other, opposed to any metal being used for the purpose of fixation or repair in bone surgery, advocating bone plates, bone nails and bone pegs throughout.

These two gentlemen were most liberal in their comments on the work being done by Dr. Thornton. The entire assembly, of more than two thousand leading surgeons of this country and foreign countries, gave a warm welcome of approval of the wonderful demonstration given by Dr. Thornton at that meeting. Little criticism, and much satisfaction was expressed openly in favor of the manner in which he handled his subject, and the clarity and simplicity in the mastery of his methods.

Dr. Smith-Petersen first used the nail in 1930 and his method was perfected and published in 1931. However, Dr. Johansson, of Sweden, recognized the fine qualities of the Smith-Petersen nail, and made great improvements in simplifying its insertion and its ability to hold without plaster cast reinforcement.

Dr. Albee has always been a master in bone surgery, disapproving of any metal being used. In 1912 he gave us his perfected method of pinning the fractured hip where we had intracapsular fracture. During the World War I he had a great opportunity to prove and perfect his technic. It was my privilege to observe his work at that time, and his results were excellent in his hands but not so much in the hands of others. Like Dr. Thornton, he is a past master in the art of bone surgery.

The object of my discussion is not primarily for the purpose of appraisal of the most excellent work done by Dr. Thornton. He is too well known as a surgeon of the South and of this country to receive extensive laudations at my hands, but I must say he is an artist and a master in his line of work, and he possesses skill and *tactus eruditus* that are lacking in many surgeons in the field of work to which he confines his activities. I must say here that I am not unmindful of his background

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2. Harkins, Henry N.: The Treatment of Burns, Springfield, Ill., Charles C. Thomas, 1942.
3. Editorial, J. A. M. A. 119:416, 1942.
4. Wells, Donald B.; Humphrey, Henry D., and Coll, James J.: The Relation of Tannic Acid to the Liver Necrosis Occurring in Burns, New England J. Med. 226:629 (April 16) 1942.

during his association with the great master in this reconstruction work, Dr. Michael Hoke. Dr. Michael Hoke has given us original ideas and fundamental principles that go down in medical records, and has contributed much to the progress in orthopedic surgery.

Now, the real reason for this discussion is for the benefit of those not familiar with the little pamphlet "Questions and Answers Concerning the Use of the Smith-Petersen Nail in Intracapsular Fracture of the Neck of the Femur and a Detailed Description of the Method," compiled by Dr. Lawson Thornton and Dr. Calvin Sandison. I suggest to those of you that haven't a copy, request Dr. Thornton to mail you an issue for your review and ready reference. It is something worthwhile in hip surgery.

Dr. J. Hiram Kite (Atlanta): I wish to thank all the doctors who discussed my paper.

OFFICIAL CALL

TO THE OFFICERS FELLOWS AND MEMBERS OF THE
AMERICAN MEDICAL ASSOCIATION:

The ninety-fourth annual session of the American Medical Association will be held in Chicago, Illinois, from Monday, June the twelfth, to Friday, June the sixteenth. Nineteen hundred and forty-four.

The House of Delegates will convene on Monday, June the twelfth.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June the thirteenth, at 8 P.M.

The various sections of the Scientific Assembly will meet Wednesday, June the fourteenth, at 9 A.M. and at 2 P.M. and subsequently according to their respective programs.

JAMES E. PAULIN, *President*
H. H. SHOULDERS
Speaker, House of Delegates

Attest:

OLIN WEST, *Secretary*

Chicago, Illinois, March the fifteenth

HOUSE OF DELEGATES

The House of Delegates will convene at 10:00 a.m. on Monday, June 12, 1944, in the Red Lacquer Room of the Palmer House, Monroe Street between State Street and Wabash Avenue.

Clearly, the programs for rehabilitating the tuberculous are in their initial stages of development. Many successful but isolated rehabilitation projects, for a decade or more, have been acting as beacons lighting up the course along which a national effort in this sphere may proceed. A comprehensive and coordinated national rehabilitation program is required. Without it, the effectiveness of mass case-finding campaigns and of subsequent sanatorium treatment is, in considerable measure, vitiated, and the disease remains a needlessly large drain upon the resources of the nation.—Louis E. Siltzbach, M.D.—*NTA Clip Sheet*.

Tuberculosis, syphilis, cancer, heart disease, and other killers of mankind show no signs whatsoever of adopting a forty-hour week; instead, there is every reason to believe that unless society continues to press its fight against them with undiminished vigor we may shortly see an upsurge in their incidence as we did during and following World War I.—E. E. Kleinschmidt, M.D., Ohio St. Med. Jour., Mar. 1944.—*NTA Clip Sheet*.

THE MAN IN MEDICINE

MARVIN S. PITTMAN, Ph.D.

*President, Georgia Teachers' College
Statesboro*

You are graduating tonight. Tomorrow you will be members of a profession to which the world looks with much confidence. You are entering the profession of medicine at a time when the world has more need for accurate medical knowledge than ever before in history. Many millions of men are engaged in mortal combat, using death-dealing weapons more powerful than have ever before been conceived. As a consequence the best knowledge and highest skill of the world have been commandeered to serve the needs of the armed forces.

The needs of the peoples of the world are also greater, as a consequence of war. Problems of food, shelter and clothing are greatly increased. We face the dangers of a impoverished world. All that you can contribute to ameliorate the ills of your day will be needed.

Much will be expected of the medical profession as a profession but it should ever be clear to you that no craft, no profession is superior to the men who compose it. Whenever progress is made in any line of human endeavor, it is made because of the vision, the effort and the sacrifices of some individual.

Since you are meeting as a college class for your final session, it may be fitting to recall some of the pioneers of your profession and think for a moment upon their achievements and how they were attained. After which you might like to see what there is left for you to do and meditate upon how you may do it.

The men who are engaged in the discovery, the production, the prescription, the distribution and the application of medicines are much more important to society than are the compounds with which they deal. Medicines, as such, are but incidentals but the men who discover them and apply them are the fundamentals.

I do not wish to limit our consideration

Address delivered to the graduating class, University of Georgia School of Medicine, Augusta, March 22, 1943.

of medicine merely to certain chemical compounds. I would include also the laboratories and hospitals, the apparatus and the processes, the theories and the formulas, the acquired knowledges and the manual skills, each and all of which serve their own vital part in the general field which we call medicine. Each and all are but materials in the mind and hand of the Master. He chooses them and uses them according to the need to be served. His knowledge, His wish and His will predetermines the time and the purpose which each will serve.

From the day of the incomparably wise Hippocrates, father of medicine, nearly twenty-five hundred years ago, to the present day, men in medicine have had one abiding hope and one fixed purpose. Often they have erred in theory and in practice, often they have been victims of the mores of their times but in their hearts they have been ever true to one ideal which was to overthrow superstition, to protect motherhood, to free childhood from sickness and to bring health to all mankind. Paradoxically, the man in medicine, like all good craftsmen, has persistently sought to do his task so well that he would work himself out of a job. The ways in which he has labored have been many; the means he has used have been varied; the courage, the patience, the sacrifice he has displayed have been magnificent.

The history of medicine is a story of sublime imagination, of continuous scientific research, and of tireless and heroic labor. Each victory has revealed new enemies to be conquered. Each failure has given birth to a deeper desire for conquest of the stubborn foe. Each success has been but another step along a tortuous path which leads ever from dateless time, and the darkness of complete ignorance, to time yet unborn of more perfect light which fuller knowledge alone can give.

Who are some of the saints of the science of medicine whose service and whose sacrifices have decreased the physical ills and reduced the mental agonies of mankind?

What were the fields of endeavor through which they made their contributions? How did it happen that the man and the hour met and as a consequence the terror of some

particular disease was abated? Time will permit us only a brief glance backward to recall those by whose strong hands and sturdy wills the ravages of disease have been retarded and the blessings of health have been advanced.

There are a number of basic ideas with which men in medicine have concerned themselves. To these basic ideas and principles, many other ideas are related and are subordinate. Let us think briefly upon the following ideas and mention a few of the men who have made contributions to medical science by their study of them.

1. Birth as a stage in the life cycle;
2. The discovery of the nature of the human body;
3. The discovery of the nature of disease;
4. The search for cures for human ills.

Being born well and having a live mother survive the ordeal to serve as one's nurse is man's first great achievement. If this is successfully accomplished, he is well launched on the highway toward the mile post marked "three score and ten." The birth process has been motherhood's physical tragedy; it has been life's major crisis for infancy; and has meant bafflement, challenge, and opportunity for the medical profession.

In former times the birth process was a time not only of pain but also of loneliness and neglect of women. Weary ages ceaselessly passed before bona fide physicians used their knowledge and their skill to facilitate safe delivery of the child and thereby making more certain the saving of lives of mothers and infants. Each taboo defined and each new departure from time-honored practice made by physicians called for faith, for knowledge, for skill and for courage. Often it exacted its full measure of sacrifice and sometimes even of life itself. Even yet only a beginning has been made to provide for the prenatal care of infants and guard the well-being of motherhood during the period of pregnancy. Ignorance is still the rule for mothers and even more so for fathers. Much, if not most, of the information current concerning prenatal care is misinformation passed on from an uninformed past. Herein lies a need for

scientific service and it is an opportunity for you to be useful.

Humanity resembles the water of the sea. It has its neap tide and its flood tide. Taken as a whole the mass continues rather constant. Variations between the high peaks and the low depressions are relatively small but program comes only when the highest waves break over the restraining barriers. It is then that variations from the norm appear. It is then only that genius asserts itself. Whenever and wherever the high faves have removed the obstructions, then the lower waves can more easily follow. When genius has cleared away the brush, then even mediocrity can travel with ease. It requires a combination of the mysterious forces of the deep to produce a tidal wave in the waters of the sea or in the activities of mankind. Whence it comes and why it comes we cannot tell, but its coming produces changes which all may see. Why mankind makes its advances in tidal waves we do not know but that it does, we are aware. Hippocrates the physician; Socrates, the philosopher; Phidias, the sculptor; and Pericles, the statesman, all came in on the high tide of Grecian culture. The Roman tidal wave gave us Galen, the physician; Horace, the poet; Cicero, the orator; Justinian, the law-giver; Caesar, the soldier. Thus we might recount the entire history of mankind. There is the ebb and flow, the autumn and springtime, the depression and the high tide during which the genius of mankind seems to fade and flourish by some strange decree of a wise but mysterious providence. Certainly such has been the history of medicine. From Hippocrates to the great physicians of today the genius of the medical profession has appeared only when obstructions blocked the way and destiny decreed that they must be removed.

Hippocrates the Greek, and Galen the Roman, stand almost alone as beacon lights of the medical profession of the ancient world. Doubtless the length of time separating us from them is a potent factor in decreasing the stature of their contemporaries. Certainly it is true that after them scientific medicine suffered the fate of all civilization and was submerged in superstition and religious fanaticism for a long

dark millenium. When the new day dawned, out of the dark and into the light of the present day came its men of mercy, with hearts on fire to serve the suffering, and with minds alert to discover the true causes of illness and with purposes set to remove them.

The nature of the human body as a physical entity needed to be understood. For ages it had remained a mystery, the victim of numerous misconceptions and abuses. It seems simple enough now that daring pioneers have defied tradition, religion, and law even, and have discovered and revealed its nature. Andreas Vesalius, the first great anatomist, explored and revealed the nature of the normal human body by dissecting many cadavers. Giovanni Morgagni, two centuries later, while serving in the same position formerly filled by Vesalius at the University of Padua, discovered the nature of the abnormal human body by using the same methods practiced by Vesalius. His discoveries gave rise to the study of human pathology. William Harvey by much observation and experimentation discovered the facts about the circulation of the blood. Then Antoine Lavoisier answered the question of how we breathe. Many other research workers have discovered other basic truths about the nature of the human body. When these basic questions were satisfactorily answered then the medical profession was able to scientifically proceed with a study of human diseases and how to cure them, and also how to prevent them.

The great Hippocrates had recognized that diseases differ in their nature and that the treatment of them should therefore be modified accordingly. But much time and much care were required merely to catalog the nature of the more common ills to which mankind is heir. It has required, and will yet require, much more time to discover the causes of even the well known diseases and to find satisfactory remedies to cure them and to prevent them.

The time and thought of the typical practitioner of medicine have been and must continue to be used in caring for the sick. When people are ill, they want relief. They want it quickly. They want their doctor to be sympathetic, to give the impression

of industry, and above all to ease their present pain. Of course, they have a general interest in the well-being of mankind but the solving of those ills can wait for a more convenient season. They are concerned about their own pain — they want it stopped and stopped *now*. This means that practically all physicians must be healers of the sick and cannot therefore be searchers for causes of diseases, nor discoverers of cures for diseases, nor can they be benefactors of generations yet to come because of their contributions to preventive medicine. It means that the typical doctor must have healing in his mind, in his hand and in his medicine kit for the pain that is being suffered by the patient by whose bedside he sits.

Furthermore, it means that the discoveries of medical science will be made by only one man in a million, the one whom destiny selects, the one to whom she bequeaths an unquenchable urge, the one in whose path she throws the challenging, the haunting provocative and dare him to master it or else dooms him and damns him for his failure to do so.

Who, then, are some of these "one man in a million" men who have blazed the trail for the other 999,999 to follow in various phases of medical endeavor? Here are a few of them: First we would mention an Englishman, Thomas Sydenham, the Hippocrates of the seventeenth century. Opportunity called for another medical giant and Sydenham, the soldier, finally after much hesitation and evasion answered the call. He began the careful observation and the recording of the nature of diseases and thereby reduced the practice of medicine to a discipline to which experimental and mathematical sciences could make their contributions. Another was Ambrose Paré, physician, surgeon and counselor to French kings but most of all the friend of unborn infants, locked in their mother's wombs.

Then there was Ignaz Semmelweis, Austrian specialist in obstetrics, haunted and accused by the dead bodies of young mothers whom he had attended in childbirth. So haunted indeed was he that he could not rest until he had discovered the cause and had proved to the world that doctors, through

their ignorance and their carelessness, may be and often are the murderers of those whom they have been employed to cure.

All will agree that Louis Pasteur, who discovered and proved the microbe theory, is far more than the millionth man. His discovery had been implied by the work of Semmelweis in his childbed fever experience but it required Pasteur to change the attitude of prince and pauper on matters of medicine, sanitation, industry and daily living. Lord Lister was another of the giants who gave the world such a simple and effective preventive for infection thereby making surgery safe.

Then there was an interesting triumvirate. One of them a Georgian — Crawford Long. The other two were Horace Wells and William Morton. These three men developed, used, demonstrated and made popular anesthesia and by so doing made general surgery both practical and certain.

One of the most interesting of the medical trailblazers was Edward Jenner who evolved the theory and developed the practice of vaccination against smallpox, thereby setting in motion the whole movement of antitoxins.

Now, let us go back a step and recall another line of developments—that of therapeutics. In the sixteenth century there lived in Switzerland an interesting personality, known by the Latin name of Paracelsus, generally recognized as the real father of therapy. He was a wandering searcher for medical knowledge, somewhat of a mystic, certainly an egotist, a critic, a braggart, an iconoclast but in spite of it all a sincere soul, a believer that there is somewhere a suitable, specific remedy for every human ill. He almost discovered one of these specifics for syphilis which was the new European curse of his day. His contributions to medicine were primarily two: first, the theory that there is a specific remedy for every ill, and second, a progeny of followers, long delayed in getting started but who in recent years are becoming numerous and effective. Popularly these followers of Paracelsus are known as microbe hunters, death killers, men of science obsessed by an idea, each stalking either a germ or a specific remedy with which to kill it, often

paying a terrible price for his sport, paying for it in persistent toil, loneliness, sacrifice and poverty but all in the spirit and for the sake of science with the hope of serving humanity.

Who are thees mental and spiritual children of the long departed Paracelsus? Here are a few of the most familiar: The Canadian Banting, discoverer of insulin, a wonderful relief for diabetics. Patrick Manson, an English doctor with a queer idea that mosquitoes were bearers of malaria germs. Ronald Ross, an English doctor tested the theory of India; Batista Grassi, an Italian doctor, tested it in Italy; our American, Walter Reed, in Cuba proved that the mosquito was the responsible carrier of yellow fever. Soon everyone was thinking that any insect might be the carrier of some germ dangerous to man. George Minot, Boston Bay blueblood, who fed liver to victims of pernicious anemia and thereby put pep in their halting step and new purpose in their glassy eyes.

Then that interesting group of disease hunting and disease killing hounds each of whom pursued relentlessly and in his own way some part of the campaign for the destruction of the syphilis germ. Schaundinn, a German protozoologist, isolated it and identified it. A Belgian named Bordet and a German named Wassermann and an American named Kahn developed easy and reliable tests with which to determine its presence. Paul Ehrlich, a joyous German Jew in the days before the Jew-hating Hitler, designed a silver bullet called 606 which will kill 85 per cent of all the syphilis germs it hits. A Viennese psychiatrist by the name of Wagner-Jauregg who induced malarial fever in patients who were insane from paresis and thereby cooked and killed the germs; and Whitney, an American engineer, who accomplished the same result with fever electrically induced. Each of these scientists, working in his own way, has cooperated like a modern bomber crew to destroy a deraded foe.

These are but a few of the heroes of medicine, who have worked in only a few of the many phases of medicine. There are areas to which we have not even alluded. There are many unsolved problems

such as cancer still awaiting the magic touch of a Master's hand. We have mentioned only a few phases and a few contributions merely to revive in your memories examples for your inspiration and emulation.

Now let us submit ourselves to a receptive mood that we may hear what message these men of the past have for us who follow them.

These great men, these savants of science, these servants of mankind, have made their contributions to medicine and to society not primarily because of their superior intelligence or their gifts of genius. Most of them were ordinary men, just as are you and I. They differed from the ordinary men, the average, only in their ability to sense the significance of perhaps one simple fact, one incident which their daily task thrust before them.

To morrow you young men will be members of a great and honored profession. You will succeed or fail not because of your profession but because of yourselves. You will face the same task which has confronted your predecessors — to overthrow superstition, to protect motherhood, to free childhood from sickness, and to bring health to all mankind. You should have better success than your predecessors have had. You are the inheritors of their experiences and their contributions. You know their science. You can improve upon their art. That mankind is still a victim of so many ills for which cures are now well known reveals the primary task of the medical profession of tomorrow. To determine how this knowledge can be made to function in the lives of all our people is a large part of your task. To cure the sick is a noble achievement but to prevent sickness would be far better. The quality of manhood engaged in the medical profession will determine how soon and how successful we achieve the goal of health for all mankind. We shall look to you with hope and confidence that you will not shirk your duty when destiny puts a task in your path. We believe that you will live up to the ideals of the past and the faith of the present and will further glorify your great profession in the future.

STEPHENS HALES AND THE FOUNDING OF GEORGIA

JOSEPH KRAFKA, JR., M.D.

Augusta

The Reverend Doctor Stephen Hales is famous in medicine as the man who first canalized the carotid artery and obtained a definite quantitative measurement of the blood pressure. His work is credited as being the most important advance in vascular physiology since that of Harvey. He was the first to pith the frog and demonstrate the spinal nature of reflexes (Fulton, 1938). These facts are very well known but some of his other discoveries and inventions are only occasionally mentioned and his work as a member of the Board of Trustees for founding the Colony of Georgia rarely merits a line in history.

A review of the archives dealing with the establishment of Georgia indicates that there is a close correlation between his scientific interests and his personal interests in the founding.

Hales was born 1677 at Bechesbourn Kent. His grandfather was Sir Robert Hales of Kent. His father married Mary Wood, an heiress. Stephen was the sixth son. At the age of nineteen he entered Cambridge. As a student he repeated many of the experiments in physics and chemistry of Boyle, and established a lively interest in science. He received his M.A. in 1703, took orders and a B.D. in 1711. He began his ministry as curate of Teddington in 1710. He married the daughter of the rector of Halishan, but she died without issue in 1721 and Hales did not remarry.

He was appointed a fellow in the Royal Society in 1718 and a permanent member in 1727. It was in this year that he published his first article on *Vegetable Statics*, an investigation which led to his more famous essay on *Haemostatics* in which he describes his method of measuring the blood pressure.

This later paper was published in 1733, during the year in which he was most active as a Trustee for the Colony of Georgia.

It is also of interest to note that in the same year Oxford honored him with the degree of D.D. The Colonial Records now refer to him as Dr. Hales. He had taken the oath of office in August 1732, and was commissioned to take subscriptions for the establishment of the colony. The minutes show that he rarely missed the weekly meetings of the Trust. He presided over the session on September 14, when daCosta and Suasso were commissioned to take subscriptions presumably for the purpose of advancing botany in the colony. He was absent on Jan. 5, 1734, when this commission was recalled when it was learned that their real purpose was to settle Jews in Georgia.

Some of the most important actions taken by the board when Hales was present were: the appointment of Dr. Cox, surgeon; purchase of a chest of medicines for the colony; erection of a court of judication in Savannah; appointment of Hawkins as bailiff of Frederica; the payment of John Wesley approved; setting aside 300 acres of land for religious use; approval of a grant of 50 acres, a cow and a sow for bond servants out of term; approval of Whitfield's plan for an orphanage; approval of action which allowed Oglethorpe full authority to divide the land among the settlers.

A personal plan of Hales was to provide for the education of the people of the colony, and to this end he collected a large number of books, including in the first shipment 40 bibles, 60 testaments, 100 prayer books, 50 *Duty of Man*, 50 *Church Monitors*, 72 *Psalms*, 50 *Family Devotions*, 100 horn books, 72 spelling books and 100 *Lewis' Catechisms*. His second collection consisted of 200 Gough's *How to Walk with God*, 200 *Guide to Christian Families*, 200 *Family Devotions* and 200 copies of a pamphlet, *Friendly Admonitions to Drinkers of Brandy and Distilled Spirits*. The latter pamphlet was one of his own, published anonymously. It is of interest when we consider the fact that he approved of the shipment of 10 tons of strong beer to be sent to the colony, and the allowance of one quart of beer daily to embarkees.

The reports and letters coming back to the trustees from the colonists stimulated

his interest in a number of practical problems. In 1739 he published a long paper on "philosophic experiments containing useful and necessary instruction for such as undertake long voyages at sea, showing how salt water may be made fresh and wholesome, and how fresh water may be preserved sweet; how biscuits, corn, etc., may be secured from the weevil, maggots and other insects; and flesh preserved in hot climates by salting animals whole; to which is added an account of experiments and demonstrations on chalybeate or steel-waters, with some attempts to carry them to distant places preserving their virtue to a greater degree than has hitherto been done; also a proposal for cleaning away mud, etc., out of rivers, harbours and reservoirs."

In the *Colonial Records* there appears an entry that he presented the colony with two of his "famous brass cocks for salting animals whole."

In 1749 he was again in the chair when the English colonists appealed for the right to introduce slave labor, but the committee sided with the Scots and Moravians who were against the plan. He was also present at the final meeting when the trust surrendered its charter and the colony became a royal province.

It was during the colonial period of Georgia that Hales made his second great contribution to medical science through his introduction of ventilators. In 1741 Sutton, a coffee housekeeper in Aldersgate Street, Captain Triewald, of the Swedish Navy, and Hales, met in London and discussed the construction of ventilators. Hales' system employed a set of bellows, worked either by hand or by windmill, designed to renew the air in prisons, aboard ship or in hospitals. Hales' system was installed in the infamous Newgate and Savoy prisons and in the jails at Winchester, Durham and Northampton, with the subsequent reduction of the death rate in four months by 50 per cent. The results were so impressive that many British ships installed the system, while the French Navy adopted Triewald's plan.

Hales induced Captain Ellis, in 1753, to try out the plan in his slave ship. Hales was familiar with the terrible death rate from records coming back from Georgia such as those of Captain Dyamond, who embarked from Guinea with 350 slaves aboard, 250 of whom died in passage. Captain Ellis writes concerning Hales' device:

"The ventilators were of singular service to us; they kept the inside of the ship cool, sweet, dry and healthy. The number of slaves I buried was only six, and not one white man of our crew (which was 34) died during a voyage of fifteen months, an instance very uncommon. The 340 Negroes were very sensitive of the benefits of a constant ventilation, and were always displeased when it was omitted."

Captain Thompson on the frigate *Success* published on Sept. 25, 1749, the following experience:

"Our rule for the ventilating was half hour every four hours, but when the ventilation was sometimes neglected for eight hours together, then we could perceive, especially in hot weather, a very sensitive difference from the neglect of it. All agreed the ventilators were of great service. The men did not need to be urged to work them. Two hundred men aboard for a year, pressed from the gaols, with distemper, all landed well in Georgia" (Harris, 1916).

Hales' various philanthropies were recognized when he was made Chief Almoner to Her Royal Highness, the Princess Dowager, and his scientific efforts were rewarded by membership in the French Academy in 1753, to succeed his deceased friend Sir Hans Sloans.

His tomb bore the inscription:

"He was skilled in helping man's troubles, he, too, is tracing God's works."

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Clinical and roentgenological data so far made available are as yet inadequate both quantitatively and qualitatively to permit, even tentatively, a positive evaluation of the curative effects of such drugs upon tuberculosis in human beings. Until controlled studies of adequate scope have been reported it is recommended that none of these drugs be used for treating tuberculous patients except under conditions which will add to our knowledge of their clinical action, and in the presence of adequate facilities to protect patients effectively from their potentially serious toxic effects. Patients and physicians must be reminded of the Federal regulations which prohibit distribution of a drug in the experimental phase of development to other than research institutions to which the material is assigned by the manufacturer for either laboratory or clinical investigation.

ETHYL CHLORIDE SPRAY FOR FREEZING DONOR AREA IN SKIN GRAFTING

JOSEPH H. GASTON, M.D.
Columbus

Recent literature has contained several articles dealing with indications and various ways for the use of freezing anesthesia. An article by Harry E. Mock, Jr., in the June 26, 1943, issue of the *Journal of the A. M. A.*, interested me. In this paper he reported 27 cases where ice bags had been used successfully for refrigeration anesthesia in skin grafting.

Freezing has been advocated for malignancy, amputations, skin grafts, etc., and it is with apologies that I again fog the subject with another method of freezing for skin grafting, one that I consider simple, safe and adequate for small areas. I specify small areas because I have only used this where small grafts were necessary. However, it is reasonable to suppose that more extensive wounds may be grafted quickly and painlessly by this simple technic.

The method is to use an ethyl chloride spray over the donor area, the tube being wrapped and held in a sterile towel. Only light freezing is necessary; the frosting is rapidly wiped away and the split skin graft is quickly removed by a razor blade held in a straight pair of forceps. The graft is then transplanted and may be fixed and dressed by the method of operator's choice. I prefer paraffin mesh next to the graft, covering this with sterile gauze and using rubber bath sponge or mechanics waste for pressure.

The donor area is covered by vaseline gauze and dressed as soon as the graft is removed. As a result of freezing there will be no immediate bleeding from the donor site and if dressed immediately, by a nurse or assistant, the field will be bloodless during the operation.

A protective plaster of paris cast may or may not be used as thought wise by the operator. I personally think that casts have been advised in a too dogmatic and rou-

time way and that by sheer size and weight they do harm in some cases by causing more pulling and movement of postoperative dressing. If grafted part can be satisfactorily suspended, I prefer a lighter dressing.

Ethyl chloride spray has been used by me over the donor areas in three cases of skin grafts. Two of them were completely successful and were performed on the ward with only a nurse as an assistant. A third case, that of a colored boy with a recurrent ulceration over an old osteomyelitis process involving the tibia, was only partially successful as most of the skin transplant did not remain viable. This case was grafted in the operating room and the condition of the grafted site was not in my opinion favorable, but was the best that I could obtain by prolonged preoperative treatment.

Assuming that other factors are equal, I believe that the results to be expected by using ethyl chloride spray would be essentially the same as those obtained by Mock in his series of cases where ice bags were used for refrigeration.

From this technic, the following (most of which has been mentioned by Mock), should and can be expected:

1. Painless and easy removal of graft, I say easy because the frozen skin has less tendency to wrinkle and grafts of more consistent thickness can be cut. Although the operating room is desirable, the procedure can be carried out in the ward, office or home with only a nurse as an assistant, and can be done on small areas in a little more time than it takes to change a dressing.

2. Satisfactory transplants can be expected and failures, in my opinion, will be due to poor condition of grafted area or faulty postoperative dressings, rather than to lowered viability of transplants from freezing.

3. The donor area can be expected to remain clean and heal rapidly. The simplicity of this method is worth consideration and if proven successful, in a larger group of cases, it should make skin grafting more popular among many doctors who have considered this an operation requir-

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Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

MAY, 1944

THE TOTAL SYNTHESIS OF QUININE

A chemical method for duplicating quinine identical in every respect to the antimalarial drug extracted from the bark of cinchona trees has finally been developed after almost a hundred years of attempts by chemists seeking the correct process.

Announcement of this achievement in organic chemistry coincides with the publication of the May 1944 *Journal of the American Chemical Society*. In a communication to the editor of *The Journal* entitled "The Total Synthesis of Quinine," Dr. Robert B. Woodward and Dr. William E. Doering describe how they solved the classic problem. The plan for synthesizing the complex drug was originated by Woodward and incorporated as a project in the basic research program of Polaroid Corporation early last year. A Harvard instructor in organic chemistry, Woodward has been chemical consultant to Polaroid since June 1942. Doering was engaged by Polaroid to work as collaborator on the project.

Woodward and Doering took less than fourteen months to complete their work. Their new synthetic material is a precise duplicate of natural quinine: it cannot be distinguished from natural quinine. In this respect it is completely unlike atabrine and plasmochin, which are used as partial substitutes for natural quinine in the treatment of malaria but actually have no chemical resemblance to quinine.

The two chemists devised their method of duplicating the cinchona drug by arranging carbon, hydrogen, and oxygen atoms in precisely the same relationships as nature's arrangement of these atoms within the molecular structure of quinine. Using common chemicals, they were able to make quinine, a goal which scientists for years had tried to achieve.

Military interest in the new process relates to its possibility as a replacement for the vast quinine-bearing cinchona tree plantations in the Jap-held Netherlands East Indies. These plantations were formerly the chief source of quinine supply for the world. It is by no means certain, however, that the synthetic drug can be manufactured on a large scale for use during the war.

Commenting on the new synthesis, Edwin H. Land, President and Director of Research of Polaroid Corporation, declared, "As yet it has not been determined whether the rather intricate process involved in this synthesis can be made commercially practicable. Polaroid's main in-

terest is in the scientific and military contribution involved in this project." Land added: "We do not expect to manufacture the products involved, but intend to license the process, after consultation with government authorities, to such organizations as are best fitted to assume the broadest usefulness for the scientific discovery. We intend to utilize any proceeds so far as practicable in furthering similar scientific projects."

In achieving their goal, Woodward and Doering not only duplicated quinine but in addition created an entirely new substance closely related to quinine. Foreign to nature, the new molecule may conceivably have medical value. The Woodward-Doering work is also significant because it promises to pave the way for other new quinine-like materials that nature has never provided.

According to the Woodward-Doering article in the *Chemical Journal*, "Quinine preparations have been known and used for centuries in the treatment of malaria. The pure crystalline alkaloid was isolated in 1820, and the extensive degradative researches of the last century culminated in the proposal of the correct structure in 1903, but the complexity of the molecule has placed hitherto insurmountable difficulties in the way of the total synthesis of the drug."

The quinine produced by the tropical cinchona tree had never been duplicated by chemists. Although chemists had isolated it from the raw bark, described it, and made accurate models of its internal structure, only the tropical tree could build up, atom by atom, the complex pattern of the true quinine molecule. In the midst of a malaria epidemic in 1856, Sir William Henry Perkin tried to synthesize quinine by simply combining the right number of the right chemical atoms. Modern chemists know that thousands of different substances have exactly the same number and kind of atoms, and that it is the arrangement of the atoms that distinguishes one of these compounds from another. Therefore, Perkin's chances for success were about as good as those of a carpenter who tries to build a house at the foot of a hill by dropping the shingles, rafters, doors and windows from the hilltop. What he produced was not quinine but mauve, the dye that started the organic chemical industry. Later efforts by others also failed to duplicate the natural drug, but some of these were invaluable to Woodward and Doering who fitted earlier contributions with contributions of their own, like pieces of a complicated jig-saw puzzle, to achieve the total synthesis.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

RALPH HILL CHANEY, M.D.

Elected President-elect of the Medical Association of Georgia at its ninety-fifth session, Savannah, May 9-12, Dr. Ralph Hill Chaney, of Augusta, will become President of the Association in 1945.

The son of Lucian W. and Mary Hill Chaney, Ralph Hill Chaney was born in Northfield, Minnesota, Dec. 4, 1886. Believing with Cicero that "man was born for two things — thinking and acting," Chaney early sought an education at Carleton Academy and Carleton College in his home town. Later he attended Oberlin College, Oberlin, Ohio, where he was granted two degrees: A.B. in 1909, and A.M. in 1913. In 1909-10 he filled the position of assistant in the Department of Physics at Oberlin.

Deciding for a medical career, Chaney next sought admission to the University of Pennsylvania School of Medicine, where he received his M.D. degree in 1914. Realizing at this time that a medical education is never finished, he became a member of the house staff of Bellevue Hospital, New York City, where he worked until 1915. The two following years he was intern and resident, respectively, at Kings County Hospital, Brooklyn, New York. Part of 1917 he did private practice in New York City, and was surgeon to the Clyde-Mallory Steamship Lines; but when America became involved in World War I he volunteered for service to his country. He served with distinction in the Army Medical Corps until 1919, being discharged with the rank of major.

Following his discharge from the Army, Dr. Chaney became a member of the staff of Mayo Clinic, Rochester, Minnesota, first as a fellow and then as an assistant, where he remained until 1922. He then accepted the offer of the professorship of surgery at the University of Georgia School of Medicine, which position he filled until 1932 when he engaged in private practice. Since 1934 he has been one of the clinical professors of surgery in this school.

Dr. Chaney has long been active in organized medicine. He has attended many



RALPH HILL CHANEY, M.D., Augusta
President-Elect 1944-45

medical meetings, has held many positions of trust, and has been a frequent contributor to medical literature. In recent years he has manifested much interest in the so-called "new order of medicine." His experience and good judgment will be most valuable in the work of the Medical Association of Georgia, particularly in the planning of work to be done in the postwar period. In this work he will have not only the full cooperation of the members but will have the support of his distinguished wife, whose record as the President of the Woman's Auxiliary to the Association reflects much credit.

The Chaney's have one daughter and three sons. Two of the sons — twins — are students at the University of Pennsylvania School of Medicine, and one is a noted physicist engaged in work for the war research program. To this family has come many honors, but this brief sketch deals with a few of the accomplishments of Dr. Chaney. In addition to holding memberships in his county and state medical organizations, he is a member of the American Medical Association and is a fellow of the American College of Surgeons. Finally, he is a member of the following named fraternities: Nu Sigma Nu, Pi Gamma Mu and Alpha Omega Alpha.

WOMAN'S AUXILIARY

President—Mrs. Olin S. Cofer, 948 Lullwater Road, Atlanta.

President-Elect—Mrs. W. T. Randolph, Winder.

First Vice-President—Mrs. Ralph Fowler, Marietta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Richard Binion, Milledgeville.

Recording Secretary—Mrs. Chas. Usher, 6 East Liberty St., Savannah.

: OFFICERS 1943-44

Corresponding Secretary—Mrs. H. H. Askew, 1329 Springdale Road, Atlanta.

Treasurer—Mrs. Lucius N. Todd, Rural Delivery No. 2, Augusta.

Historian—Mrs. W. W. Puett, Norcross

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. J. Harry Rogers, 1325 Peachtree St., N.E., Atlanta.

BARROW COUNTY

The Woman's Auxiliary to the Barrow County Medical Society held an interesting meeting recently at the home of Mrs. R. B. Russell in Winder with Mrs. A. B. Russell as co-hostess. Dr. A. B. Russell, son and husband of the hostesses, is serving overseas as a Lieutenant Colonel in the U. S. Army Medical Corps. Mrs. C. B. Almand, president, presided and appointed the following chairmen: Membership, Mrs. R. H. Randolph and Mrs. A. B. Russell; U. S. Cadet Nurses' Corps Recruiting, Mrs. W. T. Randolph; Doctor's Day, Mesdames S. T. Ross, A. B. Russell, R. H. Randolph and Ernest Harris. It was reported that members had been engaged in the following activities: nurses' aide, health clinics, first aid, doctor's aide, purchase and sale of U. S. war bonds and stamps, knitting, sewing, Red Cross roll call, blood plasma, recruiting for nurses' cadet corps and the WAC, salvage and kits for soldiers. Mrs. Almand, captain of Barrow County for the cancer drive, announced the drive would be sponsored by the Auxiliary and told of cases in the county benefitting from the fund. Mrs. S. T. Ross, program chairman, introduced Mrs. W. T. Randolph, who gave an interesting talk on nurses' aides. Mrs. R. H. Randolph was welcomed as a new member. A social hour followed the business session.

COBB COUNTY

Mrs. G. O. Allen, retiring president of the Woman's Auxiliary to the Cobb County Medical Society, entertained the members at luncheon recently at Aunt Fannie's Cabin. New officers were elected: Mrs. George F. Haygood, president; Mrs. Ralph Fowler, vice-president; Mrs. Murl Haygood, secretary; and Mrs. C. D. Elder, treasurer. The following chairmen were appointed: program, Mrs. G. O. Allen; publicity, Mrs. L. L. Welch; Doctor's Day, Mrs. Regina Rambo Benson; health, Mrs. M. N. McCall, Jr., and Mrs. E. M. Bailey, of Acworth, co-chairmen; student loan fund, Mrs. Herbert Fowler; Jane Todd Crawford Memorial, Mrs. W. C. Mitchell, of Smyrna; Research in Romance of Medicine, Mrs. W. H. Perkinson; and scrapbook, Mrs. Ralph Fowler. It was announced that on Doctor's Day pots of blooming plants were sent to the Marietta Hospital, each a tribute to the

memory of a Marietta physician. Greeting cards were sent to doctors at the Marietta Air Base and the doctors associated with the Bell Aircraft Corporation. Mrs. Benson spoke to both Kiwanis and Rotary Clubs on Doctors' Day.

BALDWIN COUNTY

The Baldwin County Medical Auxiliary met recently at the home of Mrs. Z. S. Sykes in Milledgeville with Mrs. C. G. Cox and Mrs. J. A. Bradford co-hostesses. Mrs. Sam Anderson, president, presided and 15 members and 4 visitors were present. Reports were given by officers and chairmen and delegates and alternates were elected to the state convention. The Auxiliary gave \$5 to the Red Cross. Mrs. J. I. Garrard, program chairman, introduced Miss Wilma Pool, head of the home management department in Baldwin County, who talked on nutrition. A paper was read on Jane Todd Crawford, who first submitted to abdominal surgery, and Miss Mary Anne Bostwick gave a piano solo. A social hour was held later.

WARE COUNTY

Mrs. W. M. Flanagan was elected president of the Woman's Auxiliary to the Ware County Medical Society at a recent meeting held in Waycross at the home of Mrs. W. P. Stoner with Mrs. C. A. Witmer and Mrs. C. M. Stephens hostesses. Other officers elected were Mrs. Kenneth McCullough, vice-president; Mrs. W. C. Hafford, secretary; and Mrs. J. B. Gay, treasurer. Plans were made for the district meeting to be held in Waycross and for the State Convention in Savannah in May. Following the meeting refreshments were served.

RICHMOND COUNTY

The Woman's Auxiliary to the Richmond County Medical Society met recently with Mrs. W. A. Risteen at her home in Augusta. Mrs. Robert E. Leonard, president, presiding. Guests were introduced, after which plans were made to have a speaker on the Murray-Wagner-Dingell bill at the next meeting. An outline was made for the date of volunteer hostesses at the USO. Mrs. Ralph Chaney presented a program on Doctors' Day. Following the meeting a social hour was enjoyed. Mrs. Eugene Matthews poured coffee

(Continued on page 159)

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone WALnut 8911; residence, VERNon 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone WALnut 8911; residence, JACKson 7979.

PROCUREMENT AND ASSIGNMENT SERVICE FOR NURSES OF GEORGIA

MRS. MILDRED B. PRYSE, R.N.

Executive Secretary

Georgia State Nursing Council for
War Service

131 Forrest Ave., N. E., Atlanta 3, Ga.

The Nursing Division of Procurement and Assignment has for its objectives:

1. To procure nurses to meet the needs of the armed forces, having due consideration for civilian nursing needs.
2. To bring about the equitable distribution of nurses in order to maintain the best possible nursing service for the civilian population and non-military governmental agencies.

Criteria have been established for the use of State and Local Committees by people who have studied nursing conditions in many sections and in all branches of nursing service. This study took much careful consideration, and is serving as a splendid guide to committees. It follows the same lines as the objectives and purposes of Nursing Councils for War Service, and works with the cooperation of the Councils.

On state and local levels Procurement and Assignment Committees are the same as the Nursing Council P & A Committees, the chairman of the State Committee for Nurses being the chairman of the P & A Committee of the State Nursing Council. All these committee members serve without compensation. Most District Committees have sub-committees who submit information about all nurses in their respective areas for the approval of the District Committees. Forms are then forwarded to the State Committee, where the classification of the nurse is approved or rejected, according to the information submitted. The nurse is then notified of classification, and if she is considered essential to the position she is holding she is advised to stay in that position. If it appears that a nurse

is not doing as much nursing as she should be able to do, or is non-essential to her position, she may be classified as available for relocation. If she is unable to do nursing service, due to physical or other reasons, she may be considered as not available for nursing service.

Nurses who are not in essential nursing positions, and who are potentially qualified for military service, are declared available for military service and advised to contact the local Red Cross Nurse Recruitment Committee and make application for appointment to the Army or Navy Nurse Corps. When this happens, her clearance form is sent to the Recruitment Secretary of the Red Cross Committee, who takes care of it from there on. Without this clearance form she is not to be assigned to military service, and if she has been classified as essential to her position she needs to obtain a release and a reclassification before receiving assignment, if she decides to go into military service.

When all classifications are made the work is not done, for as new classes graduate new graduates are to be classified, and there are reclassifications to be made. When a nurse or her employer is not in accord with her classification, she may appeal for reclassification. If she has sound reasons for such request, her committee is ready to try to make some adjustment. When she changes positions, she is due a reclassification. It takes the cooperation of every one of us to make it go smoothly, and nurses or their employers should be encouraged to notify committees of any changes made. An effort is made to keep enough nurses in essential positions, and to help those in non-essential position to relocate into the most-needed places. In Georgia, few nurses in hospital positions are classified other than essential. Private duty and office nurses who are eligible for military service, are usually declared available, as there are others who can relieve them. Consideration is given to doctors carrying heavy loads if their nurses have been long with them.

A nurse or a committee is being appointed in each area served by a local United States Em-

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GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

HOW WE MAY SECURE BETTER CONTROL OF TUBERCULOSIS

Tuberculosis mortality reports for 1943 indicate we have not quite held our own, but nearly so. The number of deaths in the State has mounted to 1,235 from 1,265 in 1942, and the rate per 100,000 population from 40.5 in 1942 to 41.1 in 1943. It is said, however, that the Nation's rate has not increased. It is the general opinion that the rate will materially increase unless extraordinary effort is employed to prevent it. In England, it is reported, a 13 per cent increase in deaths from tuberculosis occurred early in the war because control efforts were allowed to diminish. Later, when these efforts were revived, the rate became stationary. The implication is clear — we must hold what we have and even try to make gains in spite of the war, and we must lay plans now for the continued fight to finally eliminate tuberculosis.

2,409 new cases of tuberculosis were reported in 1943. Judging by the records of the past twelve years, we may expect not less than 2,700 new cases to be reported each year. Nor can we reasonably expect fewer deaths to occur unless we intensify our efforts at case-finding, treatment of cases found, closer supervision of contacts, and toward the enactment and enforcement of laws making it possible to satisfactorily control people with communicable tuberculosis.

The control of tuberculosis, simply expressed, requires the discovery and isolation of every communicable case of tuberculosis, and the discovery and supervision of all the persons who have had contact with source or communicable cases. It is known that the most danger is to the immediate or household contacts. Nevertheless, the tuberculin test has shown that more than fifty per cent of our general population has been infected with tubercle bacilli, and from these infected cases new cases will develop from time to time.

The following measures are proposed:

(1). A minimum of 2500 sanatorium beds in the State are needed. Actually we have approximately 900 beds. In order to encourage the building of institutions by local governments, it is suggested that a subsidy of thirty dollars per month for the operation of such institutions be paid by the State. The balance, which would probably be about thirty dollars per month, would be provided by the county or city operating the institution. Funds for the construction of such institutions would be borne by the local governments.

It is recommended that a colored sanatorium of two hundred fifty beds at an approximate cost of \$500,000 be built by the State, operated by the State, located in Atlanta, and that the

ramshackle buildings at Alto be scrapped.

It is further suggested that the State require thirty dollars per month for every patient treated in the State Tuberculosis Sanatorium, this amount to be paid either by the patient or by the county from which the patient comes.

The total cost to the State, then, for the subsidy and maintenance of 2500 beds would amount to \$912,500.

(2). In order that tuberculosis control measures may be more effectively put into use, it is suggested that every county in the State be required to have a full-time public health nurse at least, if it is not possible to set up a complete public health unit.

(3). It is suggested that twelve field tuberculosis clinicians be employed in regions developed on a population basis to cover the entire State, each to have an office in the respective regions. If the clinicians could be secured at \$3,600.00 per year, the salary cost would be \$43,200.00, to which travel expenses of approximately \$14,400.00 would have to be added. These clinicians could hold fifteen clinics each per month, and have the rest of the time for case follow-up, special consultations and supervision of artificial pneumothorax clinics, consultation work in local sanatoria, and work with problem cases.

Instead of having mobile units for each of these field clinicians, in the long run a more economical and certainly a much more satisfactory program could be carried on if a fluoroscopic-radiographic unit were established in each county in the State. Thirty of these units have already been established, which would leave 129 counties not yet provided with such apparatus. At an average cost of about \$1,000.00, such equipment could be installed at a total of about \$129,000.00. Development of films could be done locally, pictures could be made when emergencies required them between clinics; records and films could be kept in the regional offices instead of the central office in Atlanta, and the reports to the physicians of clinic results could emanate from the local offices.

Additional money would probably have to be provided for secretarial work in the offices of the regional tuberculosis clinicians. However, such an office might be established with the local county health office in which the clinician might make his headquarters. If so, perhaps 25 per cent of the salary of the local secretary might be borne by the State Health Department which might amount to about \$3,600.00 per year.

An extremely useful adjunct to tuberculosis control activities would be the installation in each local health department of a suitable visible tuberculosis register. Such a register properly

set up and employed would provide an easy method of checking up at any time on the tuberculosis problem or situation in the health area covered. It would show what service was being rendered and where and when services should be performed. It would afford an instantly available record of each case and each contact, showing classification status, supervision, kind of treatment and any other pertinent information desired. Comparatively little time would be required to keep it up and the outlay for equipment and supplies would not be prohibitive.

It is suggested that the establishment of proper tuberculosis control measures in all State institutions under the supervision of the State Health Department, assisted wherever possible by the local health departments, be provided by law; that a tuberculosis hospital for tuberculous prisoners be established in connection with the State Prison at Tattall, and if it seems necessary, another at Gracewood.

It should be provided by law that transients be hospitalized at State expense until their legal residence can be established and removal to their place of residence can be accomplished.

It is believed that the laws should be amended to provide for immediate apprehension by complaint of local health officers or official health agencies, of communicable cases of tuberculosis who show evidence of mental incompetency and to further provide for incarceration at the State Sanatorium at Milledgeville, or other suitable place under guard, pending final disposition of the case in court.

It should also be made possible to prevent the spread of tuberculosis and other communicable diseases in jails. It should be required that each jail have quarters to effectively isolate inmates with tuberculosis or other communicable disease, or that it be made possible to transfer such persons to the State Prison Hospital.

The sooner all of these facilities can be provided the sooner will come complete mastery over tuberculosis. Compared to results we may reasonably expect, the cost would be low. Estimated costs are as follows: Present Sanatorium appropriation \$420,000.00, Field Control and Artificial Pneumothorax Refill Treatment Program—cost about \$60,000.00, total present cost per annum \$480,000.00. If the subsidy plan is adopted, the present 900 beds in the State at \$30.00 per month would cost annually \$328,000.00. Increase to 2500 beds would gradually raise cost to \$912,500.00. Twelve regional control units—estimated cost per year \$112,000.00, case-finding units, administering program and maintaining a central registry \$40,000.00. One additional 35 mm. x-ray machine and truck \$5,000.00. Total first year cost to State for treatment in 900 beds under subsidy plan and for 12 regional tuberculosis control units and the Division of Tuberculosis Control \$485,500.00; 129 fluoroscopes installed would

cost about \$129,000.00, bringing the total cost when these are added up to \$614,500.00. Should it be decided to do without them, 12 portable units might be provided at a total cost including light trucks for \$30,000.00 and might be operated at a cost of about \$35,000.00 per annum. This would lessen the total cost to \$550,500.00 but could not provide nearly as satisfactory service.

The advantages to be derived from this entire plan in operation would be reflected in a many times increased case-finding, case-follow-up and treatment program. It should also result in the building of more sanatoriums by counties and cities having the assurance that real assistance in operating them could be had.

There are many reasons why a State Negro Sanatorium of not less than 250 beds should be located in Atlanta. Negroes represent over a third of the State's population. Tuberculosis is five times more prevalent among them than among white people. Tuberculosis cannot be controlled in the white race unless it is simultaneously controlled in the colored. We should not shrink from the cost which may be anywhere between \$500,000.00 and \$750,000.00 to construct and a State cost under the subsidy plan of \$91,250.00 annually to operate it.

A practical plan of tuberculosis is presented. We can beat tuberculosis if we are willing to pay the cost. We pay anyhow, whether we are aware of it or not. But we are not always paying effectively.

H. C. SCHENCK, M.D.

*Director, Division of Tuberculosis Control
Georgia Department of Public Health.*

RABIES CONTROL BADLY NEEDED IN GEORGIA

Rabies among animals, especially dogs, foxes and cats, is widely distributed throughout Georgia, and there is definite evidence that the disease is increasing.

During 1943 the laboratories of the Georgia Department of Public Health found rabies in the brains of 589 animals. This is only a fraction of the total incidence, since many dogs dying of the disease are never submitted for examination.

The laboratories furnished treatment for 2,296 persons who were bitten by, or more or less exposed to rabid animals. Only one human death occurred. This is a creditable record of service and activity on the part of the laboratory, but what effect has this had on the control of rabies in animals? None whatever.

The State Department of Health has been engaged in the diagnosis of rabies in animals for 37 years. During this time more than 27,337 animal heads have been examined with positive findings in 13,336. Antirabic treatment has been manufactured and furnished free of charge to 64,689 people since the work began in 1907. A remarkable record indeed! And yet rabies is increasing.

The rabies problem in Georgia will continue to flourish and increase until the source of the disease is controlled. The source is the dog. If there were no dogs

there would be no rabies. Yet life without dogs would be drab indeed. Therefore, the real solution lies in the control of rabies in dogs. The method is not easy, but one of our neighboring states is showing us that it can be done.

Ten years ago rabies was even more prevalent in Alabama than in Georgia. During the period 1932 through 1936, from 836 to 1017 rabid animals were found by the Alabama laboratories each year, as compared with 343 to 590 found in Georgia during the same period. In 1937 the Alabama laboratories reported 927 rabid animals found and furnished antirabic treatment to 3,794 persons. During the same year 697 rabid animals were reported in Georgia, and 3,445 persons received treatment.

Five years later (1942) rabies had decreased in Alabama to the extent that only 220 rabid animals were reported as compared with 514 in Georgia that same year. Why this sudden reversal?

The answer is that in 1937 the Alabama legislature passed a compulsory state-wide rabies control law. This law named both the Alabama State Health Department and the State Veterinarian as enforcement agencies, but placed the direction and organization of enforcement on the shoulders of the State Veterinarian.

The Alabama law requires that all dog owners must have their dogs vaccinated annually with antirabic canine vaccine of approved quality. The law also provides that all stray and unvaccinated dogs running at large be impounded, and that all dogs bitten by rabid animals be quarantined or destroyed.

Space does not permit a detailed description of the Alabama law. During the period 1937 to 1943 between 150,000 and 200,000 dogs were inoculated annually. But most important of all, the disease has rapidly declined to less than 20 per cent of its former level. Only three Alabama counties refused to enforce the law. In one of these, Mobile County, rabies is still just as prevalent as ever, and accounts for about 75 per cent of all rabies reported in the State. On the other hand, Montgomery County, once heavily infected, has rigidly enforced the law and has had only two rabid dogs reported in the past five years.

What Alabama has done Georgia can do likewise. Repeated attempts have been made for the past ten years to have a state-wide rabies control law enacted by the legislature. Each attempt has failed. Once the law passed both houses only to be vetoed by the governor, simply because it entailed the payment of a small fee of 75 cents by the dog owner.

Inoculation of dogs cannot of itself be relied upon to control rabies. The vaccine though greatly improved recently in efficiency does not protect all dogs. It does, however, protect the majority. Just as important as vaccination are the impounding and destruction of stray dogs, and the quarantine or destruction of all exposed animals.

At one time the writer of this article was very skeptical of the value of dog vaccination. In view of the inferior quality of the first vaccines put on the market this skepticism at that time seemed justified. Today, however, a greatly improved product made under strict government supervision is available, and the State of Alabama has demonstrated that with the aid of vaccine, and

by the enforcement of other essential measures, rabies can be controlled. The same thing can be done in Georgia.

It is probable that another attempt will be made to have a state-wide rabies control law enacted in the next Georgia legislature, which meets in January, 1945. Public interest will decide the issue.

T. F. SELLER, M.D.

Director of Laboratories,

Georgia Department of Public Health

ETHYL CHLORIDA SPRAY FOR FREEZING DONOR AREA IN SKIN GRAFTING

(Continued from page 151)

ing expensive instruments, assistants, and an operating room. As a result too many wounds have been allowed to heal slowly with disfiguring scars and in many instances, with avoidable and disabling contractures.

Conclusions

1. For reasons, already stated, skin grafts, one of our most valuable aids in wound healing, have been used too little and by too few doctors.

2. I am suggesting here a method, not "foolproof" but simple and one that can be used by any doctor who has had some surgical experience. Its application is simple and less time-consuming than with ice bags, and as the skin can safely stand extremely low temperatures over short periods of time, I would consider the method as safe and possibly safer than prolonged refrigeration anesthesia.

Other advantages are that smaller or larger areas can be frozen as desired, and if stinging occurs the spray may be reapplied at any time during the operation. Also, the change of donor site can be made at will and this is at times desirable. Like ruining a vein at times in a transfusion, so is a donor site occasionally made undesirable by a slip up in cutting our grafts. This error, I believe, happens to everyone at times, even after years of experience in removing skin transplants.

3. This is not to be considered a short cut and a substitute for finished plastic surgery, but it is almost a "one man technic"; that when used properly on selected cases the procedure may make more extensive and late plastic repairs unnecessary.

NOTE: Having done a large number of skin grafts

in the past, practically all of which were performed under general anesthesia, and having had my share of failures, I have observed this interesting fact—even in my failures, when the transplants did not remain viable the wound always improved and seemed to heal more rapidly. I have tried to explain this on one or both of the following theories:

High bactericidal qualities of the epithelial covering and on the rationale of the Orr treatment for osteomyelitis, in that frequent dressings of wounds do harm. In a grafted area, we at least give nature a few days chance with a physiologic epithelial covering, and without frequent dressings, chemicals, etc.

WOMAN'S AUXILIARY

(Continued from page 155)

and Mrs. W. W. Battey, Jr., and Mrs. Perry Volpito were co-hostesses with Mrs. Risteen.

WARE COUNTY

Mrs. Bert Malone and Mrs. J. E. Penland were hostesses at the March meeting of the Woman's Auxiliary to the Ware County Medical Society, which was held at the home of Mrs. Malone in Waycross. Mrs. M. M. Harris, chairman of the Ware County Tuberculosis Committee, gave an informative talk on the work of the committee. Reports of committees were given and it was stated that subscriptions to Hygeia, the national health magazine published by the American Medical Association, had gone over the top for the year. Plans were made for the observance of Doctors' Day, when flowers will be sent to the Waycross hospitals, cards to the doctors overseas and boutonnieres to the doctors in the city.

RANDOLPH-TERRELL

The Woman's Auxiliary to the Randolph-Terrell Counties Medical Society held its March meeting with Mrs. J. C. Patterson at her home in Cuthbert. Six members were present. Dues were collected and other business postponed until the April meeting.

NURSES' ASSOCIATION

(Continued from page 155)

ployment Service to act as a consultant to that office and the Area Management-Labor Committee. This is done in order that requests by nurses for statements of availability or referrals may be handled by the local office of U. S. E. S. with the help of nursing consultation which is made available by Procurement and Assignment Service and used whenever necessary.

MEDICAL ASSOCIATION OF GEORGIA

Financial Statement of All Cash Assets

May 1, 1943, to April 30, 1944

RECEIPTS

May 1, 1943:

Cash in Fulton National Bank		
Subject to check.....	\$15,023.81	\$15,023.81
Ten \$1,000 U. S. Government		
Bonds	8,300.03	
Accrued interest	217.50	8,517.53
Fulton National Bank.....	1,330.12	
Accrued interest	13.33	1,343.45
Citizens & Sou. National Bank..	5,409.36	
Accrued interest	54.22	5,463.58
First National Bank.....	5,367.95	
Accrued interest	53.80	5,421.75
Standard Federal Savings and		
Loan Association	5,342.04	
Accrued interest	161.46	5,503.50
Receipts from operating.....	21,310.05	21,310.05
		<hr/>
		\$62,583.67

DISBURSEMENTS

April 30, 1944:

Disbursements itemized	\$16,983.63	
Cash in bank subject to check..	19,350.23	
Ten \$1,000 U. S. Government		
Bonds	8,517.53	
Fulton National Bank.....	1,343.45	
Citizens & Sou. National Bank..	5,463.58	
First National Bank.....	5,421.75	
Standard Federal Savings and		
Loan Association	5,503.50	\$62,583.67

MEDICAL ASSOCIATION OF GEORGIA

Receipts and Disbursements

RECEIPTS

May 1, 1943, to April 30, 1944

Cash on hand subject to check.....	\$15,023.81	
Receipts (other than accrued interest)	21,310.05	\$36,333.86

DISBURSEMENTS

Disbursements itemized	\$16,983.63	
Cash in bank subject to check.....	19,350.23	\$36,333.86

THE JOURNAL OF THE MEDICAL ASSOCIATION

Receipts and Disbursements

May 1, 1943, to April 30, 1944

RECEIPTS

Advertising	\$8,243.55	
Membership subscriptions	4,307.00	
Regular subscriptions	53.50	\$12,604.05

DISBURSEMENTS

Printing and mailing.....	\$4,105.32	
Salaries	2,770.00	
Postage	292.00	
Envelopes	254.88	
Engraving	209.00	
Rent	280.00	
Extra work	265.25	
Commission on advertising.....	165.12	
News Clippings	60.00	

Copyright	24.00	
Addressograph	15.40	
Gain	4,163.08	\$12,604.05

MEDICAL ASSOCIATION OF GEORGIA

Receipts and Disbursements

May 1, 1943, to April 30, 1944

SOURCES OF INCOME

Dues	\$10,050.00	
Advertising	8,243.55	
Exhibits	2,940.00	
Accrued Interest	500.31	
Subscriptions	53.50	
Public Relations Bureau.....	23.00	\$21,810.36

DISBURSEMENTS

Itemized expenses	\$16,983.63	
Gain	4,826.73	\$21,810.36

May 1, 1943:

Cash and cash assets..... \$40,773.31

May 1, 1944:

Cash and cash assets..... \$45,600.04

Gain in cash and cash assets..... \$ 4,826.73

I N C O M E

May 1, 1943, to April 30, 1944

Date			
Deposited	Source	Amount	
May 17, 1943.....	Dues	\$ 497.50	
	Ads	58.25	
	Exhibits	425.00	
	Subscription	3.00	\$ 983.75
June 1, 1943.....	Dues	238.00	
	Ads	482.03	
	Exhibits	660.00	
	Subscription	3.00	1,383.03
June 25, 1943.....	Dues	175.00	
	Ads	532.62	
	Exhibits	360.00	
	Subscription	3.00	1,070.62
July 13, 1943.....	Dues	283.50	
	Ads	510.58	794.08
Aug. 19, 1943.....	Dues	199.50	
	Ads	570.34	
	Subscriptions	20.00	
	Pub. Rel. Bureau..	3.00	792.84
Sept. 20, 1943.....	Dues	81.00	
	Ads	783.36	
	Pub. Rel. Bureau..	20.00	884.36
Oct. 1, 1943.....	Dues	157.50	
	Ads	592.74	750.24
Nov. 29, 1943.....	Dues	28.00	
	Ads	568.12	
	Exhibit	85.00	
	Subscription	3.00	684.12
Dec. 21, 1943.....	Dues	196.00	
	Ads	1,459.74	
	Exhibit	610.00	
	Subscriptions	5.50	2,271.24

Jan. 19, 1944.....	Dues	581.00	
	Ads	500.02	
	Exhibits	150.00	
	Subscriptions	7.50	1,238.52
Feb. 1, 1944.....	Dues	1,778.00	
	Ads	16.50	
	Exhibits	105.00	
	Subscription	3.00	1,902.50
Feb. 16, 1944.....	Dues	1,659.00	
	Ads	304.30	
	Exhibit	60.00	2,023.30
March 2, 1944.....	Dues	1,141.00	
	Ads	31.00	
	Subscription	3.00	1,175.00
Mar. 21, 1944.....	Dues	1,281.00	
	Ads	865.73	
	Exhibit	75.00	
	Subscription	2.50	2,224.23
April 14, 1944.....	Dues	1,341.00	
	Ads	473.14	
	Exhibits	225.00	2,039.14
April 28, 1944.....	Dues	413.00	
	Ads	495.08	
	Exhibits	185.00	1,093.08
			\$21,310.05

MEDICAL ASSOCIATION OF GEORGIA

Disbursements Itemized

May 1, 1943, to April 30, 1944

No.	Name	Amount
4080—	Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for April 1943 less 5% withheld for Vic- tory Tax, U. S.....	\$ 240.10
4081—	H. L. Rowe Salary for Executive Secretary for April 1943 less 5% withheld for Vic- tory Tax, U. S.....	185.47
4082—	Darby Printing Co. 600 Copies of the April 1943 issue of the Medical News.....	21.00
4083—	Addressograph Sales Agency Work on addressograph.....	1.15
4084—	Member Pension from Benevolent Fund.....	30.00
4085—	H. L. Rowe Work for Public Relations Bureau and other incidental expenses.....	107.50
4086—	Mrs. G. R. Sims Secretarial work for the Public Rela- tions Bureau and other special work	195.00
4087—	Edgar D. Shanks, M.D. Incidentals, travel expense, Committee on Public Policy and Legislation and Public Relations Bureau.....	228.00
4088—	Spencer A. Kirkland, M.D. Expenses incurred as chairman of the Committee on Public Policy and Leg- islation	60.00

4089—Edgar H. Greene, M.D. Expenses incurred for the Committee on Public Policy and Legislation.....	50.00	4107—Wm. A. Mulherin, M.D. Payment on expenses as delegate to attend the meeting of the House of Delegates of the A. M. A., June 7, 1943, at Chicago	150.00
4090—Franklin Printing Corporation Printing and mailing 2100 copies of the April 1943 issue of The Journal....	485.93	4108—Allen H. Bunce, M.D. Payment on expenses for delegate to attend the meeting of the House of Delegates of the A. M. A., June 7, 1943, at Chicago	150.00
4091—Artercraft Engraving Co. Cuts for illustrations.....	39.72	4109—Edgar D. Shanks, M.D. Payment on expenses for special rep- resentative to attend the meeting of the House of Delegates of the A. M. A., June 7, 1943, at Chicago.....	150.00
4092—L. F. Livingston, Postmaster Postage	30.00	4110—W. A. Selman, M.D. Payment on expenses for special rep- resentative for the Procurement and Assignment Service for physicians in the meeting of the House of Delegates of the A. M. A., June 7, 1943.....	150.00
4093—Owen Hawkins Balance on pay for night watchman for technical exhibit.....	35.00	4111—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for May 1943, less 5% Victory Tax for U. S.	240.10
4094—Cash for expenses Cash paid out for commercial and sci- entific exhibitors, \$30.25; advance pay- ment to policemen, \$10; head porter, \$10; work at registration desk, \$20; operating movie machines, \$30; op- erating switch lights, \$6; head police- man, \$5; janitor at Academy of Medi- cine, \$5; May 11-14, 1943.....	116.25	4112—H. L. Rowe Salary for Executive Secretary for May 1943, less 5% Victory Tax.....	185.47
4095—J. D. Grant Trip to and from Milner, cloth, strips of lumber, nails, tacks, expenses and pay of labor; expenses and pay for labor for exhibits, May 11-14, 1943....	89.75	4113—M. F. Fowler, M.D. Expenses for music by the Emory Quartet at the Memorial Exercises at annual session, May 11-14, 1943.....	20.00
4096—L. F. Livingston Postage	30.00	4114—Eagle-Empire Letter Service 500 2-page copies of resolution for the Committee on Public Policy and Leg- islation in reference to Medical Legis- lation	14.00
4097—Miss Annie Jacks Commission on advertising orders.....	27.00	4115—Atlanta Linen Service Linen Service for March, April and May 1943	3.75
4098—Kathleen & McKay Slides for Memorial Exercises made from pictures of deceased members.....	25.00	4116—L. F. Livingston Postage	30.00
4099—Art Sign Co. Signs for the Atlanta session, May 11-14, 1943	59.00	4117—Member Pension from Benevolent Fund.....	30.00
4100—Franklin Printing Corporation Printing 900 programs for the Atlanta session, May 11-14, 1943; 300 pro- grams for the Woman's Auxiliary and 1,000 registration cards.....	187.00	4118—Southern Bell Tel. & Tel. Co. Telephone account to May 21, 1943.....	7.85
4101—Logan Clarke Insurance Agency Premium on surety bond for Secretary- Treasurer	5.00	4119—Artercraft Engraving Co. Cuts for illustrations.....	31.15
4102—Fulton Brothers Electric Co. Connecting, wiring and flood lights for exhibitors at Biltmore Hotel, May 11- 14, 1943	38.00	4120—Franklin Printing Corporation Printing and mailing 2350 copies of the May 1943 issue of The Journal.....	303.03
4103—V. P. Sydenstricker, M.D. Expenses to and from Atlanta as guest speaker on the program of the Medical Association of Georgia, May 11-14, 1943	7.80	4121—Ivan Allen-Marshall Co. Twine, second sheets, gem clips, Journal and letter folders.....	12.10
4104—Southern Bell Tel & Tel. Co. Telephone account to April 21, 1943....	10.38	4122—Darby Printing Co. Printing 600 copies of the June 1943 issue of the Medical News.....	21.00
4105—Southern Press Clipping Bureau News clippings for April and May 1943	10.00	4123—Biltmore Hotel Expenses during annual session, May 11-14, 1943; H. L. Rowe, \$28.15; Ad-	
4106—Olin H. Weaver, M.D..... Payment on expenses as delegate to attend the meeting of the American			

miral Sheldon, \$4.00; Edgar D. Shanks, M.D., for guests and help, \$39.83; C. C. Maher, M.D., \$20.25.....		92.23	4139—Grover Middlebrooks, Atty. Expenses to and from Eastman in the trial of suit of Mrs. J. G. Keen vs. Warren A. Coleman, M.D., Eastman..		21.15
4124—James E. Paullin, M.D. Rooms for Admiral Sheldon, et al. during the annual session at the Biltmore Hotel, May 11-14, 1943.....	24.00		4140—L. F. Livingston, Postmaster Postage	30.00	
4125—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for June 1943, less 5% Victory Tax withheld	240.10		4141—Southern Press Clipping Bureau News clippings for June and July 1943	10.00	
4126—H. L. Rowe Salary for Executive Secretary for June 1943, less 5% Victory Tax withheld	185.47		4142—Darby Printing Co. 600 Copies of the Medical News for July 1943	21.00	
4127—Member Pension from Benevolent Fund.....	30.00		4143—Southern Bell Tel. & Tel. Co. Account to July 21, 1943.....	6.95	
4128—Collector of Internal Revenue Victory Tax withheld from salaries of Edgar D. Shanks, M.D., and H. L. Rowe	50.79		4144—Biltmore Hotel Breakage of floor lamp during annual session May 11-14, 1943; typing report of Reference Committee and expenses of Dr. J. A. Redfearn, president.....	57.75	
4129—L. F. Livingston, Postmaster Postage	30.00		4145—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for July 1943, less 20% withholding tax	226.00	
4130—Associated Mutuals, Inc. Inland Marine Insurance on picture machines used by the Councilors in their respective districts and to cover loud speakers and other equipment in health education program.....	57.80		4146—H. L. Rowe Salary for Executive Secretary for July 1943, less 20% withholding tax....	174.80	
4131—Grover Middlebrooks, Atty. Fee for retainer as attorney from July 1, 1943, to December 31, 1943.....	500.00		4147—Member Pension from Benevolent Fund.....	30.00	
4132—Chauncey C. Maher, M.D. Expenses incurred to attend the Ninety-Fourth Annual Session of the Association at the Biltmore Hotel, May 11-14, 1943, as invited guest.....	65.70		4148—Associated Mutuals, Inc. \$2,000 fire insurance on office furniture and fixtures for one year.....	3.16	
4133—Southern Bell Tel. & Tel. Co. Telephone account to June 21, 1943....	6.60		4149—Miss Winifred H. McLean Reporting Atlanta session, May 11-14, 1943; minutes of the Council; and proceedings of the House of Delegates with carbon copies	250.00	
4134—Franklin Printing Corporation Printing and mailing 2350 copies of June 1943 issue of The Journal and 200 reprints of Memorial Exercises for Dr. Wm. R. Dancy.....	338.84		4150—Franklin Printing Corporation Printing and mailing 2350 copies of the July 1943 issue of The Journal....	319.84	
4135—Artercraft Engraving Co. Cuts for illustrations.....	39.70		4151—Artercraft Engraving Co. Cuts for illustrations.....	24.09	
4136—Western Union Telegraph Co. Telegraph account for the Committee on Public Policy and Legislation for June 1943	1.13		4152—L. F. Livingston, Postmaster Deposit to pay postage due on mail....	10.00	
4137—Atlanta Linen Service Accounts for June and July 1943 for linen service	2.50		4153—Register of Copyrights Deposit to pay copyright fees for The Journal of the Medical Association of Georgia	24.00	
4138—J. F. Thompson Engraving Co. Letterheads and envelopes for the President, W. A. Selman, Atlanta, 1943-1944	27.50		4154—Western Union Telegraph Co. Account for August 1943.....	2.61	
			4155—L. F. Livingston, Postmaster Postage	30.00	
			5156—J. L. Campbell, M.D., Chairman, Cancer Commission, expenses for Cancer Commission for 1943-44.....	150.00	
			4157—Miss Annie Jacks Commission on advertising orders.....	67.62	
			4158—L. F. Livingston, Postmaster Deposit for postage to mail The Journ-		

al of the Medical Association of Georgia	50.00	4179—L. F. Livingston, Postmaster Postage	30.00
4159—J. F. Thompson Engraving Co. Printing 10,000 file cards for the Blood Type Registry.....	22.50	4180 Southern Press Clipping Bureau News Clippings for August, September and October, 1943.....	15.00
4160—Searcy & Co. Premium on \$500 fire insurance on lumber and other equipment for sci- entific exhibit	10.00	4181—J. F. Thompson Engraving Co. Postal cards and printing for Commit- tee on Public Policy and Legislation in reference to Wagner-Murray-Dingell bill (S. 1161).....	25.50
4161—American Surety Co. of N. Y. Premium on surety bond for Executive Secretary for one year to September 1944	5.00	4182—Addressograph Sales Agency 500 Name plates	1.90
4162—Member Pension from Benevolent Fund.....	30.00	4183—A. B. Dick Co. Two pounds of mimeograph ink.....	5.00
4163—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for August 1943, less withholding tax.....	226.00	4184—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for October 1943, less withholding Gov- ernment tax	226.00
4164—H. L. Rowe Salary for Executive Secretary for Au- gust 1943, less withholding tax.....	174.80	4185—H. L. Rowe Salary for Executive Secretary for October 1943, less withholding Gov- ernment tax	174.80
4165—Franklin Printing Corporation Printing and mailing 2350 copies of the August 1943 issue of The Journal	314.55	4186—Member Pension from Benevolent Fund.....	30.00
4166—Southern Bell Tel. & Tel. Co. Account to August 21, 1943	6.88	4187—L. P. Matthews, M.D. Refund for overpayment of dues in remittance of October 7, 1943.....	7.00
4167—L. F. Livingston, Postmaster Postage	30.00	4188—Franklin Printing Corporation Printing and mailing 2350 copies of the October 1943 issue of The Journal	339.66
4168—A. B. Dick Co. Service on Mimeograph machine for six months	9.00	4189—Franklin Printing Corporation Reprints of an abstract of the pro- ceedings of the House of Delegates, Ninety-Fourth Annual Session, Atlan- ta, May 11-14, 1943, also list of of- ficers and committeemen for 1943-44....	68.50
4169—Addressograph Sales Agency Service on Addressograph and ribbon	5.70	4190—Atlanta Linen Service Linen service for October and No- vember, 1943	2.50
4170—Atlanta Linen Service August and September 1943 accounts	2.50	4191—N. I. Tyus Storage on equipment for scientific exhibit for one year to June 1943.....	25.00
4171—Member Pension from Benevolent Fund.....	30.00	4192—S. H. Benedict 150 Floor prints of Hotel DeSoto, Sa- vannah, to be used during the Ninety- Fifth Annual Session of the Medical Association of Georgia.....	20.50
4172—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for September 1943, less withholding tax	226.00	4193—L. F. Livingston, Postmaster Postage	30.00
4173—H. L. Rowe Salary for Executive Secretary for September 1943 less Government with- holding tax	174.80	4194—Artercraft Engraving Co. Cuts for illustrations.....	4.64
4174—Collector of Internal Revenue Tax withheld from salaries of Edgar D. Shanks, M.D., and H. L. Rowe for July, August and September, 1943.....	125.10	4195—Shanks Jewelry and Music Co. Repairs and equipment for picture machines	56.64
4175—Capital Electric Studios, Inc. Repairing broken desk lamp.....	4.35	4196—Ansley Hotel Balance on account.....	1.90
4176—Southern Bell Tel. & Tel. Co. Account to September 2, 1943.....	7.20	4197—Ivan Allen-Marshall Co. Paste, twine, gem clips and wrap- ping paper	8.50
4177—Artercraft Engraving Co. Cuts for illustrations.....	27.88		
4178—Franklin Printing Corporation Printing and mailing 2350 copies of the September 1943 issue of The Journal	314.55		

4198—Southern Bell Tel. & Tel. Co. Account to October 21, 1943.....	6.60	4216—Miss Annie Jacks Commission on advertising orders.....	70.50
4199—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for November 1943, less U. S. Govern- ment withholding tax	226.00	4217—L. F. Livingston, Postmaster Postage	30.00
4200—H. L. Rowe Salary for Executive Secretary for November 1943, less U. S. Government withholding tax	174.80	4218—Collector of Internal Revenue Tax withheld from salaries of Edgar D. Shanks, M.D., and H. L. Rowe, Oc- tober 1, through December 31, 1943....	149.10
4201—Member Pension from Benevolent Fund.....	30.00	4219—Southern Bell Tel. & Tel. Co. Account to December 21, 1943.....	7.32
4202—Atlanta Envelope Co. For 51,400 envelopes for mailing The Journal (Less 2%).....	254.88	4220—Member Pension from Benevolent Fund.....	30.00
4203—Franklin Printing Corporation Printing and mailing 2350 copies of the November 1943 issue of The Journal	307.50	4221—Grover Middlebrooks, Atty Retainer fee for attorney from Janu- ary 1 through June 30, 1944.....	500.00
4204—Arctcraft Engraving Co. Mounting plates for advertisers.....	4.50	4222—Franklin Printing Corporation 1,000 Reprints of article entitled The Wagner-Murray Bill	8.75
4205—L. F. Livingston, Postmaster Postage	30.00	4223—Arctcraft Engraving Co. Mounting and repairing plates for ad- vertisers	2.25
4206—Atlanta Linen Service Linen Supply Service for November and December 1943	2.50	4224—Southern Press Clipping Bureau News clippings for November and De- cember 1943	10.00
4207—Southern Bell Tel. & Tel. Co. Account to November 21, 1943.....	6.60	4225—L. F. Livingston, Postmaster Deposit for postage to mail The Journal	50.00
4208—W. A. Selman, M.D. Honorarium for president for 1943- 44 and expenses on Procurement and Assignment Service for Physicians....	400.00	4226—Franklin Printing Corporation Printing and mailing 2350 copies of the December 1943 issue of The Journal	369.21
4209—John B. Fitts, M.D. Expenses incurred for the Procure- ment and Assignment Service for Phy- sicians	200.00	4227—L. F. Livingston, Postmaster Postage	30.00
4210—J. F. Thompson Engraving Co. Engraving on the Hardman Loving Cup for the award to Dr. Jas. E. Paul- lin	9.80	4228—J. B. Richards Printing Co. Membership cards for 1944.....	18.95
4211—Shanks Jewelry and Music Co. Parts and repairs for picture machines for visual education by the respective Councilors	25.74	4229—Franklin Printing Corporation Ruling and printing forms for report- ing roster of officers and members.....	25.25
4212—Ivan Allen-Marshall Co. Journal for registering names and ad- dresses of members with index tabs....	3.25	4230—The Tidwell Co. Coupons for typewriter ribbons and carbon paper	21.00
4213—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for December 1943, less Government with- holding tax	226.00	4231—Member Pension from Benevolent Fund.....	30.00
4214—H. L. Rowe Salary for Executive Secretary for December 1943, less Government with- holding tax	174.80	4232—Addressograph Sales Agency Ribbon for Addressograph and serv- ice on machine.....	6.65
4215—H. L. Rowe Balance Salary May to December 1943, and increased salary October to December 1943, less withholding tax..	96.00	4233—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for January 1944 (less withholding tax) ..	226.00
		4234—H. L. Rowe Salary for Executive Secretary for January 1944, less withholding tax....	196.80
		4235—Southern Bell Tel. & Tel. Co. Account to January 21, 1944.....	11.32
		4236—Franklin Printing Corporation Extra charges for setting 6 point type in Directory Journal, December 1943	36.50
		4237—Franklin Printing Corporation Printing and mailing 2350 copies of	

the January issue of The Journal.....	303.00	and March 1944.....	15.00
4238—Artaft Engraving Co. Repairs and changes on plates for ad- vertisers	4.15	4258—A. B. Dick Company Stencil sheets and fluid.....	3.70
4239—J. F. Thompson Engraving Co. Buying and printing 2,000 postal cards for Committee on Scientific Work.....	24.00	4259—Ivan Allen-Marshall Co. Gem clips, pencils and filing cards...	3.15
4240—Ruggles Cabinet Shop Bookcase and table.....	33.00	4260—Southern Bell Tel. & Tel. Co. Telephone and Telegraph account to March 21, 1944.....	9.21
4241—L. F. Livingston, Postmaster Postage	30.00	4261—Herff-Jones Company President's Gold Key for W. A. Sel- man, M.D., president 1943-1944.....	9.26
4242—Fulton County Medical Society Rent for one year from February 22, 1944, to February 22, 1945 (and painting)	560.00	4262—L. F. Livingston, Postmaster Deposited on postage due account.....	10.00
4243—L. F. Livingston, Postmaster Postage	30.00	4263—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for March 1944, less withholding tax de- ducted by U. S. Government.....	226.00
4244—Edgar D. Shanks, M.D. Salary for Secretary-Treasurer for February 1944, less withholding tax..	226.00	4264—H. L. Rowe Salary for Executive Secretary for March 1944, less withholding tax de- ducted by U. S. Government.....	196.80
4245—H. L. Rowe Salary for Executive Secretary for February 1944, less withholding tax..	196.80	4265—Member Pension from Benevolent Fund.....	30.00
4246—Ivan Allen-Marshall Co. Falcon pens, cards for records of members, stamp pad and pencils.....	4.80	4266—Collector of Internal Revenue Withholding tax for U. S. Government for the first quarter: H. L. Rowe.....\$69.60 Edgar D. Shanks..... 72.00	141.60
4247—Reeves Studios Enlarged reproduction of picture of the Southern Medical College Build- ing, Atlanta, and delivered to the At- lanta Historical Society.....	10.00	4267—Mrs. E. Z. Huff Office work	50.00
4248—Southern Bell Tel. & Tel. Co. Account to February 21, 1944.....	6.60	4268—Franklin Printing Corporation Printing and mailing 2350 copies of the March 1944 issue of The Journal with two color printing and inserts....	323.70
4249—Member Pension from Benevolent Fund.....	30.00	4269—Artaft Engraving Company Cuts for illustrations and work on plates for advertisers.....	5.94
4250—A. B. Dick Co. Semi-annual charges for servicing mimeograph machine	9.00	4270—L. F. Livingston, Postmaster Postage	30.00
4251—Atlanta Linen Supply Co. Linen supply service for February and March 1944	2.50	4272—L. F. Livingston, Postmaster Postage	30.00
4252—Artaft Engraving Co. Cuts for illustrations and work on plates for advertisers	15.18	April 21, 1944—Check Abe J. Davis returned— paid later	7.00
4253—Barrett Radio Service Repairs on picture machine for the Fifth District	12.50	Exchange on non-par checks.....	8.48
4254—Franklin Printing Corporation Printing and mailing 2350 copies of the February 1944 issue of The Journal	348.96		\$16,983.63
4255—L. F. Livingston, Postmaster Postage	30.00		
4256—S. A. Kirkland, M.D. Expenses incurred for the Committee on Public Policy and Legislation— Wagner-Murray-Dingell, S. bill 1161	15.00		
4257—Southern Press Clipping Bureau News clippings for January, February			

NEWS ITEMS

The Georgia Medical Society, Savannah, met May 23 at the Society's Hall. Dr. E. S. Osborne spoke on "Psychoanalysis—Christ versus Freud."

Dr. Horace Darden, Sparta, attended the Ninety-Fifth Annual Session of the Medical Association of Georgia at Savannah, May 9-12. He represented the Hancock County Medical Society in the House of Delegates. He has the distinction of being the oldest living graduate of the University of Georgia School of Medicine, Augusta.

Eli Lilly and Company, Indianapolis, Indiana, report that supplies of Penicillin are increasing.

NEWS ITEMS

Lt. Comdr. George A. Holloway, M. C., is in active military service at U. S. Naval Base, Norman, Oklahoma. He graduated with honors at the University of Georgia School of Medicine, Augusta, in 1932; served four years as intern and resident physician at Piedmont Hospital and Grady Memorial Hospital, Atlanta. Since then he has practiced medicine in Atlanta. Dr. Holloway is a member of the staffs of Grady, Piedmont, St. Joseph's, and Crawford W. Long Memorial hospitals, and is a member of the Atlanta Athletic Club. He has practiced obstetrics and gynecology and has been certified by the American Board of Obstetrics and Gynecology.

The Bibb County Medical Society held a business meeting at Ridley Hall, Macon, April 18.

The Medical and Surgical Staff of the Georgia Baptist Hospital, Atlanta, met on April 18. The scientific program consisted of "Report of Two Cases Treated with Penicillin"; movie picture, "Transverse Cervical Cesarean Section" was shown. Dr. Major Fowler, chairman of the Clinicopathological Committee, selected the program.

Dr. Maxwell Berry announces the opening of his office in Suite 322, Doctors Building, Atlanta. His practice will be limited to diagnosis and gastroenterology.

By command of General Eisenhower, Dr. Needham B. Bateman has been promoted from Major to Lieutenant Colonel. He writes: "Enjoying the Ga. Journal very much. Regards to you and all the doctors."

The Georgia Medical Society, Savannah, met on April 25 at the Society Hall. Dr. G. H. Lang read a paper entitled, "The Problem of the Cross-Eyed Child."

The Bibb County Medical Society met at Hotel Dempsey, Macon, May 2. Guest speakers were Dr. W. A. Selman and Dr. Edgar D. Shanks, president and secretary-treasurer, respectively, of the Medical Association of Georgia.

Dr. C. L. Ridley, Macon, has been elected chairman of the State Board of Health to succeed Hon. Robert F. Maddox, who resigned after serving as chairman for 21 years. Mr. Maddox will continue to serve as a member of the board; his term runs for four years.

Dr. Fred Barry Hodges, Jr., announces the removal of his offices to Suite 1115 Doctors Building, 478 Peachtree Street, N. E., Atlanta. Hours 11 to 1:00; 3:00 to 5:30. Wednesdays and Saturdays, 11 to 1.

The Fulton County Medical Society met on May 4. The scientific program consisted of a "Symposium on Headache" was made up of four papers by the following authors: "Internal Medicine" by Dr. E. Van Buren, Atlanta; "Otorhinolaryngology," Dr. Wm. C. Warren, Atlanta; "Allergy," Dr. Hal M. Davison, Atlanta; "Neurology," Dr. Wm. A. Smith, Atlanta, as printed in The Bulletin of the Fulton County Medical Society, Atlanta.

The Bulletin of the Fulton County Medical Society published May 4 was devoted almost exclusively to a discussion of the Wagner-Murray-Dingell bill and the provisions of the Committee on Public Policy and Leg-

islation and its plans for the future.

Hospital for Joint Diseases, 1919 Madison Avenue, New York 35, New York, wants to make twelve appointments to a general rotating service where each of the following subjects will be taught: Surgery, Urology, Proctology, Gynecology, Obstetrics, Ophthalmology, Otolaryngology, Orthopedic Surgery, Neuro-Surgery, Anesthesia, Medicine, Pediatrics, Neuro-Psychiatry, Dermatology, Pathology, Chemistry, Bacteriology, Radiology, Physical Therapy.

The Bibb County Medical Society met at Ridley Hall, Macon, May 16. The meeting was held to receive reports from the delegates to the Ninety-Fifth Annual Session of the Medical Association of Georgia held at Hotel DeSoto, Savannah, May 9-12.

Dr. Abe J. Davis, Richmond County Commissioner of Health, Augusta, was elected president of the Georgia Public Health Association on April 22.

Dr. Elizabeth Blackwell was the first woman to establish a hospital to be staffed by women, known as the New York Infirmary for Women and Children in 1847. The New York Infirmary for Women and Children is now one of New York's best hospitals. It has departments of surgery, medicine, obstetrics, pediatrics and laboratory.

Dr. David M. Wolfe, formerly of Atlanta, has been elected Dougherty County Commissioner of Health.

Staff meeting of the Georgia Baptist Hospital, Atlanta, was held on May 16. Dr. Zach Jackson was chairman of the Program Committee. No other meetings of the staff will be held before October 1.

OBITUARY

Dr. Harry Lee Upshaw, Social Circle; member; Emory University School of Medicine, Emory University, 1915; aged 51; died April 6, 1944, after a long illness. He was born at Rosebud, Gwinnett County. He served his internship at the Pacific Railroad Hospital, Tacoma, Washington. He began practice in Social Circle in 1916, later he enlisted in the Medical Corps of the U. S. Army, served as a lieutenant at Camp Wheeler, Macon, until July, 1918, then he was transferred to France. While in France Dr. Upshaw received a commission as captain. After he received an honorable discharge, his commanding officer stated that he was "A splendid officer in any selection." He was not a character who would be changed by the wishes of any one, but stood firm in his belief of whatever he deemed right. He was a member of the Walton County Medical Society; Lindsey-Harper Post No. 46 of the American Legion. For many years and until his death he was local surgeon for the Georgia Railroad. Surviving him are his widow, two daughters, Mrs. Robert Charles Aycock and Mrs. Theo L. Leres, all of Social Circle. Elder R. L. Cook officiated at the funeral services conducted at the residence. Interment was in Circle Rest Cemetery, Social Circle.

Dr. George C. Trimble, East Point; member; Emory University School of Medicine, Emory University, 1888;

aged 80; died April 9, 1944. He was a native of Fulton County and spent his life in and near Atlanta. He served as local surgeon for the Central of Georgia Railway Company for 28 years; he was physician for Cox College and the Georgia Baptist Orphanage. He was an active civic and church leader and was widely known for his medical service for numerous charitable institutions. He was a member of the Woodmen of the World, Masons and First Baptist Church. Surviving him are his daughter, Mrs. R. E. Boyle, Jr., and one son, Harold C. Trimble, Miami, Fla. Rev. W. A. Duncan and Rev. E. C. Wilson officiated at the funeral services conducted at the residence. Burial was in College Park Cemetery.

Dr. John Willis Hinton, Atlanta; Emory University School of Medicine, Emory University, 1892; aged 74; died April 10, 1944, at his residence. He was born in Social Circle. After he graduated in medicine he took post-graduate study in New York then began practice at Pine Log. Later he moved to High Shoals and practiced there for 20 years until he was disabled before he moved to Atlanta. Surviving him are his widow, two sons, Private James B. Hinton with the U. S. Army, and Jack Hinton, Atlanta. Rev. E. Nash Broyles and Rev. D. C. Starnes officiated at funeral rites conducted at the Park Street Methodist Church. Interment was in West View Cemetery.

Dr. Alexander Stephens Holden, Ellijay; Emory University School of Medicine, Emory University, 1897; aged 78; died April 16, 1944, after a short illness in an Atlanta hospital. He was born in Johtown, Ga. Dr. Holden was one of the leading citizens of that section and spent a great deal of time and efforts for the welfare of the people in Gilmer County. He was devoted to his family and profession. In the death of Dr. Holden the State has lost a valuable citizen. He was a member of the F. & A. M. Surviving him are his widow, two sons, Dr. F. C. Holden and Lowry S. Holden, both of Atlanta; one daughter, Miss Winnie Belle Holden, Columbia, S. C. Funeral rites were held in Ebenezer Baptist Church. Burial was in the churchyard.

Dr. Benjamin Franklin Eberhardt, Gillsville; Emory University School of Medicine, Emory University, 1896; aged 75; died February 21, 1944, in Lula, Ga. He practiced medicine at Oxford, Ga., from 1919 to 1936, then moved to Gillsville, where he practiced until disabled. He was a member of Lula Methodist Church. Surviving him are his widow, four daughters and one son. Funeral services were conducted at the Lula Methodist Church. Burial was in Dry Pond Cemetery, Jackson County.

Dr. John F. Reid, Buchanan; member; Emory University School of Medicine, Emory University, 1892; aged 76; died April 3, 1944, at the home of his daughter, Mrs. L. W. Hewitt, Carrollton. He practiced in Haralson and adjoining counties for a half century. He was favorably known throughout the county. Dr. Reid served as Mayor of Buchanan for a number of terms, also as representative in the General Assembly

of Georgia, and was county treasurer at the time of his death. Regardless of the ability of a patient to pay his account, Dr. Reid went at all times during the day and night to relieve suffering humanity. He was a member of the Haralson County Medical Society and the Buchanan Baptist Church. He is survived by his widow, two daughters, Mrs. L. W. Hewitt, Carrollton, and Mrs. L. T. Spier, Atlanta; three sons, Morgan Reid, Fort Myers, Florida; Herschel Reid, Villa Rica, and Bob Reid of the U. S. Army. Funeral services were conducted at the Buchanan Baptist Church. Burial was in Buchanan Cemetery.

Dr. Charlie A. Kelley, Lilhurn; Atlanta College of Physicians and Surgeons, Atlanta, 1909; aged 72; died March 18, 1944, in an Atlanta hospital after a long illness. He was a native of Berkshire District, Gwinnett County. He was especially interested in his profession and used every means at his command for the improvement of his patients, yet he spent some time in looking after his farm and cattle. He was a member of the Luxomni Baptist Church. Surviving him are his widow, three daughters, Mrs. Gaines Ivey, Norcross; Mrs. Otis McEachern, Charleston, S. C.; and Mrs. Arthur Alford, Lawrenceville; one son, Lieut. Charles Amos Kelley, Jr., U. S. N. R., Boston, Mass. Rev. Harry Spivey officiated at the funeral services conducted at Luxomni Baptist Church. Burial was in Luxomni Cemetery.

Dr. John Paul Jones, Savannah; member; Emory University School of Medicine, Emory University, 1915; aged 56; died on April 10, 1944, in a Savannah hospital after a long illness. He was a native of Autauga-ville, Alabama. He served his internship in St. Joseph's Hospital, Savannah, later he became president of the staff. He served in World War I and was medical officer with the Savannah Volunteer Guards, and was first lieutenant in the 74th Infantry at Camp Devens, Mass. Dr. Jones was a member of the Georgia Medical Society, Savannah, a fellow of the American College of Surgeons and a member of the American Medical Association, fourth degree member of the Knights of Columbus, and Chatham Post No. 36 of American Legion. He took post-graduate study in New York. He is survived by his widow, Mrs. Marie Tully Jones, a number of brothers and sisters.

Dr. Marion Russell Thomas, Savannah; member; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1902; aged 66; died on April 8, 1944, in a local hospital after an illness of several weeks. He was a native of Savannah and well known in the medical profession. Dr. Thomas began the practice of medicine in Savannah and was favorably known by many warm friends. He was president of the staff of Oglethorpe Sanitarium, chief surgeon of the Southern Railway and local physician for the Metropolitan Life Insurance Company. Dr. Thomas was a member of the Elks, F. & A. M., Shrine and the Francis S. Bartow Camp No. 93, Sons of Confederate Veterans. Surviving him are his widow and one daughter, Mrs. Francis Hunter, Oklahoma City; one sister and two

brothers, Rev. William H. Brady and Rev. Ernest Risley officiated at the funeral rites conducted at St. John's Episcopal Church. Interment was in Bonaventure Cemetery.

OBITUARY OMISSIONS

Omissions in the list of deceased members as published in the official program for the Ninety-Fifth Annual Session of the Medical Association

of Georgia for the Savannah meeting, May 9-12, 1944, were:

DeLoach, Asa Gaston, Atlanta, March 15, 1944, aged 63.

Addresses of the following were omitted:

Robinson, Lisle Benjamin, Atlanta, November 13, 1943, aged 55.

Sibbett, William Albert, Douglas, December 7, 1943, aged 58.



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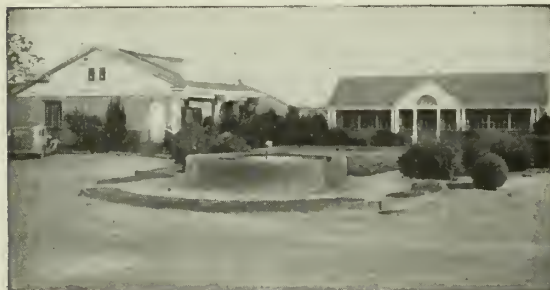
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\$10,000.00 ACCIDENTAL DEATH	For
\$50.00 weekly indemnity, accident and sickness	\$64.00 per year
\$15,000.00 ACCIDENTAL DEATH	For
\$75.00 weekly indemnity, accident and sickness	\$96.00 per year

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Number 6

PNEUMOPERITONEUM: A FORM OF COMPRESSION THERAPY IN THE TREATMENT OF PULMONARY TUBERCULOSIS

Review of 154 Cases

HORACE E. CROW, M.D.

Alto

Pneumoperitoneum is the induction into and maintenance of air in the peritoneal cavity.

We have not reviewed the literature completely on this subject, but it seems that pneumoperitoneum was first used for diagnostic purposes in 1902, for the treatment of abdominal tuberculosis in 1909, and to some extent since 1933 for the treatment of pulmonary tuberculosis. Reports of its use for the latter are few. Drolet,¹ in a review on the "Trends in Frequency and Type of Surgical Procedures in the Treatment of Pulmonary Tuberculosis," found that of 99 of the larger American and Canadian sanatoriums and hospitals, only 44 had used pneumoperitoneum in the treatment of pulmonary tuberculosis. His review covered a five-year period between 1937 and 1941. Of the 44 institutions using it, he found only 1,455 patients had received it continuously for one year or more.

Some claim¹ pneumoperitoneum is only a procedure, and that it is too indirect to find much of a place in the treatment of pulmonary tuberculosis. Others^{2,3} claim it has definite uses in collapse therapy. Chief of these are: (a) when all other forms of collapse are contraindicated such as real, ill, bilateral cases; (b) when pneumothorax cannot be established in a unilateral

case with adhesive pleuritis and the patient is a poor risk for major surgery, and (c) as a means of improving the patient for major surgery. We fully agree that this form of treatment plays a very beneficial role in compression therapy. We believe, furthermore, that its use should not be limited to such cases mentioned above. From the favorable results we have observed in certain types of unilateral cases, we believe it should be given to a greater number of this group.

The first pneumoperitoneum induced at the Georgia State Tuberculosis Sanatorium was Aug. 17, 1937. For sometime afterward it was used rather infrequently and only in far advanced, bilateral cases, most of whom were considered hopeless. We were surprised to see rather rapid improvement in several cases. For the past two years or more, it has been used in quite a number of cases with less disease, but still the greater majority were far advanced. This review covers the period from Aug. 17, 1937, through December, 1942, and includes all cases started on treatment on the white service, regardless of outcome, except those patients receiving treatment less than six months at the time of this review. In other words, no patient started on treatment after June, 1942, was included because it was felt that proper evaluation of progress could not be made.

The success of pneumoperitoneum depends largely upon the height to which the diaphragm can be elevated. Elevation of both leaves results when air is induced into the peritoneal cavity in sufficient amount to increase the intra-abdominal pressure above that of normal. There are some exceptions, of course, chief among which are the presence of pleural or subdiaphragmatic adhesions. Either pleural or subdiaphragmatic adhesions are found to be just as

Read before the Medical Association of Georgia, Atlanta, May 14, 1943.
From the Georgia State Tuberculosis Sanatorium, Alto.

great a hindrance to the establishment of an optimum pneumoperitoneum as pleural adhesions are to the establishment of a satisfactory pneumothorax. Elevation of one leaf of the diaphragm is greatly increased by first producing a temporary phrenic interruption before starting insufflations of air. It is our routine practice to precede pneumoperitoneum with a phrenic interruption on the side in most need of compression. If there is a good rise of the hemidiaphragm following phrenic paralysis, a still greater elevation follows the establishment of pneumoperitoneum.

It has long been recognized that improvement of pulmonary tuberculosis is not rare during the existence of large abdominal tumors and pregnancy. Whether improvement during pregnancy is due to endocrine, physiologic or metabolic changes, or to compression of the lung by the elevated diaphragm is not known by the writer. But it is believed to be due mostly to compression, since from our observation sex is not a factor in the improvement following induction of air. Sudden lowering of the diaphragm following delivery is believed to be a contributing factor to the frequent, rapid progression of disease.

The technic is rather simple, yet requires special care, and is not without danger. Essentially, the technic is to anesthetize the layers of the abdominal wall. The site of entrance we prefer, as suggested by Trimble,² is through or just lateral to the left rectus abdominus and just below the costal margin. When the abdominal wall is anesthetized, introduce an 18 or 19 gauge needle. We prefer the long bevel rather than the blunt needle. When it is believed the peritoneal cavity is entered, verify it by detaching the syringe from the needle; withdraw the plunger about half way; reconnect syringe with the needle and pull on the plunger to make sure the needle is not in a blood vessel. If blood is not drawn into the syringe, then gently push on the plunger. If there is no resistance encountered, it is reasonable to expect the open end of the needle is in the peritoneal cavity. Now connect with the pneumothorax apparatus and induce a minimum amount of

air. Do this by merely opening and closing the aircock. Then take a manometric reading. If the point of the needle is in the peritoneal cavity, the manometer will register either zero or slightly positive. There are two main exceptions to this rule: first, if the abdomen is tense because of the patient's apprehension, or second, if there are adhesions present the manometer will register about plus 2 or plus 3 cm. of water (plus 4 to plus 6 corrected reading). Experience has taught us that if the two latter conditions do not exist and if the manometer registers plus 2 to plus 3 cm. of water (plus 4 to plus 6 corrected reading), the point of the needle is in the tissue of the abdomen or, more likely, between the muscle fascia and the peritoneal membrane. When the needle is in the tissues, the introduction of air will produce pain. The introduced air spreads out beyond the anesthetized area. On the other hand, we have never heard a patient complain from the induction of a small amount of air into the peritoneal cavity that is free of adhesions. Of course, there may be a sense of fullness experienced in the upper abdomen following induction of 500 or 600 cc. of air, and when the patient sits up there may be some pain in the neck and shoulder, particularly on the side of the unparalyzed half of the diaphragm. During the first few refills the manometer will register slightly positive but may not show any oscillation.

The intra-abdominal space has a remarkable ability for adapting itself to changing pressures. For example, after inducing 400 to 500 cc. of air the manometer may register plus 2 to plus 4 cm. of water, but waiting a few seconds, or even in the face of inducing more air, the pressure will fall.⁴

We feel that there are three main guides in giving an initial pneumoperitoneum: first, development of the sense of touch by the operator; second, proper interpretation of manometric readings; and third, presence or absence of pain. The initial dose varies in amount depending on whether adhesions are suspected, especially subdiaphragmatic, and indicated by complaint

of pain. Ordinarily from 400 to not more than 700 cc. of air are given every few days, gradually increasing after several doses up to 1,000 cc. weekly. However, with everything working favorably, the amount given should be governed by the size and height of the patient. Following this procedure the paralyzed half of the diaphragm is, on the average and in the absence of adhesions, elevated to a level of the 4th anterior rib or 3rd anterior interspace, and in many cases as high as the 2nd anterior rib. Our average manometer reading in established cases is about plus 5 to plus 6 cm. of water (corrected reading plus 10 to plus 12). The manometer shows but slight and occasionally no oscillation, and when present it is paradoxical in comparison with the intrapleural readings. This is self-explanatory since the intra-abdominal pressure increases on inspiration and diminishes on expiration.

Evaluation of pneumoperitoneum in all classes of cases is impossible from our experience because 79.22 per cent were far advanced, many of whom had tuberculous complications and had a poor or hopeless outlook. The remainder of cases, or 20.78 per cent, were moderately advanced. We have been anxious to see more moderately advanced and some minimal cases given this form of treatment. Why it has not been induced in more moderately advanced and minimal cases of unilateral involvement is answered in favor of the prevailing opinion that when collapse is indicated, artificial pneumothorax is the usual treatment of choice.

The type case showing the most improvement is the one whose x-ray shows a predominantly exudative or soft-type lesion. The chronic fibroid or productive type does not seem to respond so favorably (it is true the productive type may not respond to any form of treatment so readily). More often in this type case it is impossible to get an adequate rise of the diaphragm because of adhesions. This may explain, in part, the difference in improvement between the two types of cases; that is, so far as pneumoperitoneum is concerned.

Pneumoperitoneum has become the treat-

ment of first choice of the medical staff at the State Sanatorium in certain cases in which there is only unilateral involvement. These cases constitute that group in which the disease is located in the middle third or base; the lesions are exudative, and may or may not show the presence of a cavity. The shadow of the diaphragm should be smooth and rounded, showing no evidence of adhesions, and with good excursion on fluoroscopic examination. In this type case it is believed pneumoperitoneum is just as rapidly effective as pneumothorax, and is immensely less dangerous. Of course, in the less resistant 'teen age group, the more radical form of treatment by pneumothorax is favored. Disease in the middle third or base is theoretically more easily compressed by the elevated diaphragm. Yet we have seen these exudative lesions located in the apex clear just about as rapidly from pneumoperitoneum as those of a lower level. This is believed to be due to the possibility that the elevated diaphragm exerts as much pressure against disease in the apex as it does in the base.

Compressing the lung by pneumoperitoneum and collapsing it by pneumothorax differ in principle. Also each has its advantages and disadvantages. By the use of pneumoperitoneum, we find: (a) the pressure is directed from below, upward and against an unyielding costal and intercostal framework covering the apex; (b) a cavity held open by apical adhesions is relaxed rather than put on tension; (c) a large amount of air in the peritoneal cavity exerts an intermediate or indirect pressure upon the lung through the means of the diaphragm; (d) compression takes place without the separation of the lung from any of its protective or surrounding structures; (e) the amount, in the absence of adhesions, and duration of compression seems to be entirely controllable and can be completely reversed at once; (f) complete deflation of the lung does not seem possible; and if it were it would be unsafe because of the danger of rupturing the diaphragm.

By the use of pneumothorax, we find: (a) the pressure is exerted from all directions, barring adhesions, toward the lung

root and against the mediastinum, which is frequently unstable and yielding; (b) a cavity held open by apical adhesions is on tension rather than relaxed; (c) considerable air in the pleural cavity exerts a direct or immediate pressure upon the visceral pleura, separating it and the lung from their surrounding coverings; (d) this leaves them unprotected against injury or complications; (e) the amount and duration of collapse are not always controllable and too often not reversible at all; (f) collapse, in the absence of adhesions, can be made complete in most cases if desired.

To enable one better to follow the clearing of disease, the use of pneumoperitoneum offers one advantage that warrants emphasis. This advantage lies in the ease with which one can follow the detailed changes in the compressed lung as revealed by the x-ray film. In connection with this thought, we wish to point out the difference between the appearance of a film of the lung under collapse or partial collapse by pneumothorax, and one under compression by pneumoperitoneum. In the case of the former, air in a pleural space, free of adhesions, causes a collapse of the more collapsible or diseased areas more readily than the normal or near normal areas. These areas, under considerable or even partial collapse, often appear and at times are atelectatic. When there is considerable collapse, there is nearly always a certain amount of obscurity of the whole lung field. Then, too, there often is an increase in thickness of the pleurae which also adds some obscurity. This density or obscurity makes it impossible to visualize the progression or retrogression of the lesions. The use of pneumoperitoneum does not cause this obscurity. This is a great advantage in following the course of disease. Even when the lesions, including cavitation, are located in the lower third or base, this advantage still holds true in most cases. This is explained by the fact that as the diaphragm is pushed upward, the lesions are also pushed upward and usually about in proportion to the rise of the diaphragm. Thus the lesions, in most instances, remain visible above the shadow of the diaphragm and

one can follow the changes with but little difficulty.

It has been claimed by some⁵ that the wearing of an abdominal binder forces the diaphragm to a higher level. According to x-ray films taken with and without a binder, we have concluded this does occur in some cases. Fremmel⁵ claims the use of a binder eliminates paradoxical movements of the paralyzed leaf of the diaphragm. In our opinion his claim is well taken. In other words, there is no movement at all on respiration. We have often observed this to be a fact on the paralyzed side, but are unable to attribute it to the use of a binder because all of our patients start wearing it soon after treatment is started and, therefore, we have not seen a group without it with which to make comparison. As will be explained later, we recommend its use for another purpose.

An established pneumoperitoneum reduces the apicobasal diameter of the lung not more than 40 to 60 per cent, but at the same time it will reduce the total volume from 50 to 65 per cent because of the interior, somewhat semiconical shape of the hemithorax. We have seen a few cases in which it was estimated the total volume of the lung was reduced 80 per cent. With no more reduction of the longitudinal diameter and total volume of the lung, one may ask why there is such remarkable improvement in many cases. I believe it is due to three factors; namely, (a) there is no movement at all of the paralyzed leaf of the diaphragm during normal respiration in most cases (the diaphragm is completely fixed, and this may or may not be due to the use of a binder); (b) the inspiratory expansion and expiratory relaxation of the remaining portion of the lung are no more than the amount of expansion and contraction of the corresponding chest wall; and (c) as the apex is approached from below the hemithorax becomes some smaller, and the amount of expansion and contraction is accordingly diminished. These three factors diminish motion of the remaining partially inflated portion of the lung more than pneumothorax does with a comparable amount of collapse. On the other hand, in

an incomplete pneumothorax, if the pleurae are not thickened and the intrapleural pressure is subatmospheric, the lung will expand and relax at the expense of the pneumothorax pocket, and with the downward and upward movements of the diaphragm. Therefore, in pneumoperitoneum, when one has an immobile hemidiaphragm and this organ is elevated high enough to reduce the volume of the lung 40 to 60 per cent, the remainder of the lung is better splinted than it would be by pneumothorax with a comparable amount of deflation.

Since air seeks the highest possible level, a well-established pneumoperitoneum will displace considerably downward the lobes of the liver, stomach and intestines when the patient is in the upright position, but they shift back in the cephalic direction, practically displacing the air beneath the diaphragm when in the dorsal, recumbent position. In the upright position, separation of the paralyzed hemidiaphragm from the corresponding lobe of the liver amounts to from 10 to 16 cm. Separation of the opposite leaf is less, but it, too, may be considerable. This makes this form of treatment beneficial in bilateral disease. An ordinary x-ray film will show the shifting of the lobes of the liver with change of position, but in order to determine the amount of shifting of the stomach and intestines, barium meals were given to several patients with and without pneumoperitoneum. A series of films were made of each patient, first in the upright position and then immediately in the dorsal, recumbent position. It was found there was a much greater shift of the viscerae in patients with pneumoperitoneum. In other words, when the patient is sitting or standing there is much more displacement downward or caudally of the viscerae in patients with pneumoperitoneum, and likewise there is a much greater shift in the opposite direction when in the recumbent position. Specifically, in the presence of pneumoperitoneum, the stomach and intestines shifted about 12 cm. higher, or in the cephalic direction, than they did in the absence of it. The amount of shift of the viscerae, after

a change of position, was determined by their relation to the dorsal vertebrae.

Some claim² there is greater elevation of the diaphragm when the patient is in the upright position. Our observation does not confirm this. We have made films while the patient was standing, lying on his back, and on each side, and although there is a change of position of the viscerae, the position of the diaphragm is practically invariant. At first one might think that such marked shifting of the viscerae would cause distressing gastro-intestinal disturbances. This might well be true were it not for the fact that tuberculous patients are in bed all, or most of the time. Yet, we have seen a number of patients whose conditions had become quiescent, sputum converted, and had been ambulant for sometime without digestive disturbances. However, among those who have had digestive disturbances prior to getting pneumoperitoneum, the majority showed marked improvement after treatments were started.⁶ Salkin⁷ claims that tuberculous peritonitis and enteritis are relieved by pneumoperitoneum in that it causes relaxation of the bowel and thus reduces the tone and hypermotility. We have not given it primarily for these complications.

As to serious complications, they are remarkably infrequent. Of the 154 cases there were only two that developed ascites. Animal inoculation with the fluid showed both to be tuberculous. It was estimated that about 12 per cent showed a very small amount of fluid in the peritoneal cavity, but there were no untoward signs or symptoms. There were five patients who developed an indirect, pneumoperitoneal, inguinal ring herniation. So far as we were able to determine the sac contained only air. The herniae were reduced, treatment was temporarily omitted, a truss properly fitted and treatment resumed without any further disturbances (it may be necessary to remove some air from the peritoneal cavity in order to reduce the hernia). There was only one case of pleural effusion, and since this is only 0.6 per cent it is doubtful if pneumoperitoneum was the cause. Contrasting this percentage with the percentage

of effusions with pneumothorax, it is obvious that pneumoperitoneum is a much safer compression therapy. Air embolism,⁸ accidental injection of air into an abdominal organ or rupture of the diaphragm is a possibility. Fortunately, we have not seen either of these occur.

It seems to be generally accepted that pleural effusion and subsequent complications occur with pneumothorax more often when there is an extensive exudative type lesion in the lung. Because of this, as aforementioned, we prefer pneumoperitoneum in certain of these cases. In connection with the frequent occurrences of pleural complications from pneumothorax, particularly when the pulmonary lesion is acute, it is well to point out that Graham, Brock and Blair claim, and Alexander accounts for it in his writings, "that an isolated lung with inflammatory edema pumps fluid into the pleural lymphatics during inspiratory expansion and presses it out (into the pneumothorax space) during expiratory relaxation." Therefore, one of the most important differences between pneumothorax and pneumoperitoneum is that in the former the parietal and visceral pleural membranes are separated by an air pocket, inviting pleural complications, while in the latter the pleurae remain in apposition.

Not classed as a complication is the development of "pot belly." This occurs in cases that receive treatment over a period of several months and is most likely due to a thinning of the abdominal muscles from being under constant tension. This condition is prevented by having the patient wear continuously an abdominal binder.

As to the outcome or results thus far of the 154 cases, it should first be remembered that 122 of these cases, or 79.22 per cent, were far advanced with either poor or hopeless outlook. It would be natural, therefore, for one to assume that the treatment was ineffectual in many and that the death rate was high.

We found treatment was discontinued on some after a few refills, and on several after a few months. In all, treatment was discontinued on 47 cases, or 35.5 per cent.

The chief reasons for discontinuing it were: first, ineffectual: by this we mean that, although there was a good elevation of the diaphragm, there was either no improvement or the condition was growing worse; second, to have thoracoplasty: the majority of these were at first far advanced with bilateral disease and entirely too poor a risk for major surgery; and third, interference of a good rise of the diaphragm by extensive adhesions. We might add that it was discontinued on three cases because of adequate treatment. Two of these were apparently arrested, and one was apparently cured.

During the course of treatment there were 24 deaths, or 16 per cent (this, however, does not include the number that may have died since treatment was discontinued because of its ineffectiveness or on account of adhesions). We made no follow-up study after treatment was discontinued on this group. Of the 154 cases, we were unable to contact five. This left 77 cases continuing treatment, of which 56, or 73 per cent, were far advanced, and the remaining 21 cases, or 27 per cent, were moderately advanced when treatment was started. These two groups have been classified according to their present clinical status, and in so doing, we found: (a) unimproved (frankly active), 10 cases or 12.9 per cent; (b) improved, 41 cases or 53.24 per cent, and (c) quiescent, 26 cases or 33.76 per cent. The sputum was converted in 33 cases, or 41.43 per cent. In reviewing the x-ray interpretations of the improved and quiescent group of 65 cases during the course of treatment, it was interesting to note that there was marked clearing in 34 cases, or 50.7 per cent. Of this number, 34 cases, there was retrogression from far advanced to moderately advanced in 17 cases, or 50 per cent. The majority of those who had a conversion of sputum showed beyond question that their cavity or cavities were closed as evidenced by x-ray films. From the x-ray evidence alone we were not certain, but it was our belief that the cavity or cavities were closed in the remainder of cases, and a

series of concentrated sputum examinations confirmed this belief.

Summary and Conclusions

1. Pneumoperitoneum with consequent elevation of the diaphragm produces partial, and often optimum, compression of one or both lungs.

2. Temporary phrenic nerve interruption prior to inducing pneumoperitoneum aids in securing greater elevation of the diaphragm.

3. Of the 154 cases, 79.22 per cent, were far advanced, more often with bilateral lesions when treatment was started.

4. The type lesion showing the greatest amount of response is the exudative, particularly when the lesions are located in the middle third of the lung.

5. The administration of pneumoperitoneum and pneumothorax differ considerably in principle, and the effects upon the lung and pleurae from pneumoperitoneum are much less likely to result in serious complications.

6. Regardless of the location of disease, pneumoperitoneum offers a greater advantage than any other form of collapse therapy in following the course of disease by x-ray study.

7. A well-established pneumoperitoneum will not reduce the apicobasal diameter of the lung more than 40 to 60 per cent and the total volume from 50 to 65 per cent, but the remaining partially inflated portion of the lung above the paralyzed hemidiaphragm is well splinted and the pressure against it is practically constant.

8. The paralyzed hemidiaphragm, once it is well elevated, remains practically stationary in most all cases regardless of position of the patient.

9. Barium meal and x-ray studies show a greater shift of the abdominal viscerae, upon change from the upright to the recumbent position, in patients with pneumoperitoneum than in those without it.

10. This form of treatment is believed to be beneficial to a number of patients bothered with gastro-intestinal disturbances.

11. We would like to see more mod-

erately advanced and minimal cases given this form of treatment.

Supplement

Since completing our review of the 154 cases, we have supplemented 69 new cases that have received treatment from 6 to 10 months. Many of these cases were better selected and the results have been more gratifying. For example, and without going into detail, 55 of the 69 cases had a positive sputum when treatment was begun, but already 27 or 49 per cent have become negative.

The author wishes to express his appreciation for the invaluable assistance of Dr. Cleveland D. Welchel, visiting staff surgeon, for demonstrating the proper technic while inducing the first pneumoperitoneum at the Georgia State Tuberculosis Sanatorium, Aug. 17, 1937. Appreciation is also acknowledged for the kind cooperation and valuable suggestions by the entire medical staff.

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Those in the general health field are apprehensive wherever social and economic factors have dislocated and reconcentrated large groups of the population. Such upheavals create what might be called an epidemic potential. One soon knows what is happening in acute communicable diseases for there is a sharp dividing line between health and acute disease. This is not the case in tuberculosis. Here the period of incubation as used in its ordinary sense, is vague, ill-defined, and long-drawn out. The onset is not dramatic and neither morbidity nor mortality figures of today reflect what is happening currently. Insofar as this disease is concerned, the aftermath of the present social and economic dislocations is as important, if not more important than the immediate effect. One must meet current problems as they arise but one must recognize that danger may not manifest itself for years to come. Harry Mustard, M.D. *Transactions, N. T. A. 1943.—Nia Clip Sheet.*

A grave menace exists of another world-wide recrudescence of tuberculosis. Its prevention will require vigorous effort against the spread of infection and all measures possible to maintain a high level of resistance to disease. Col. Esmond R. Long, M.C., U. S. A.—N.T.A. *Clip Sheet.*

MADURA FOOT

Report of the Youngest Case on Record

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Madura foot is a term coined by Colebrook at the Madura Dispensary in India in 1846, to describe a disease affecting principally the foot and which was very common in that part of the world. Gill of the same dispensary had described the same disease entity four years earlier, but gave it no definite name. To H. VanDyke Carter belongs the credit for first recognizing the fungus nature of the infection in 1860, and giving it the appropriate name of mycetoma. Both of these terms have remained firmly entrenched in medical literature ever since. Chalmers, in 1916, divided mycetomas into sub-groups: the actinomycoses and the maduromycoses. The principal mycologic distinction between the two, according to him, are that the mycelia of the former are narrow, with poorly-defined walls and nonsegmented, and do not form chlamydospores; whereas the mycelia of the latter are broader, have well-defined walls, are clearly segmented, and on most media develop chlamydospores.

It was early recognized by many different authors that cases of maduromycosis were apparently due to a number of different fungi. The first attempt at classification was based on the color of the peculiar granules or grains, frequently compared to fish roe, that are found in the sinuses in the lesions, and are often discharged in the "oily" serosanguineous pus exuding from these openings. Since the same color of granules is produced by a number of different varieties of hyphomycetes, as well as by other closely related fungi which occasionally become pathogenic for man, it is now rather generally recognized that such a clinical classification reposes on no very sound scientific basis. Many names

have been given to the fungi producing maduromycosis, which has added greatly to the confusion which has prevailed in the literature both in this country and abroad. A few of these are: actinomyces indicus; nocardia mycetomae; streptothrix madurae; actinomyces madurae; streptothrix mycetomi; and maduromyces. Gammel in his masterly monograph on the subject lists 8 genera and 17 species of fungi that have been isolated from cases of madura foot.

From what material we have been able to study it would seem that to date only about 6 cases of true maduromycosis have been reported in the United States. To these I wish to add a seventh, which is remarkable in that it occurred in the youngest patient so far reported.

Report of Case

The patient was a Negro boy eight years old, who was born and reared in Georgia. According to his history he acquired the infection when only three years of age. He thinks that he stuck a piece of glass in his foot while running about barefoot on his father's farm. The puncture wound so acquired did not heal completely, but remained open and began to discharge a thin watery blood-stained pus. After an indeterminate time the foot began to enlarge slowly and to become distorted, until it lost all semblance to a foot at all. Up until about a year ago this unfortunate boy dragged his monstrous foot about and even attended school for part of a year. He insists that during all this time it did not pain him a great deal. He was seen by a number of doctors who prescribed various treatments, including x-ray therapy, and was admitted to a hospital where he thinks his foot improved somewhat, only to become worse again.

Finally, in January, 1943, he was admitted to the Colored Annex of Columbus City Hospital as a state-aid case, on Dr. Joseph H. Gaston's orthopedic service. Dr. Gaston at once recognized the case as one of madura foot and requested a radiographic study of the member. The following is Dr. William F. Jenkins' roentgenologic report: "The tarsals, metatarsals and phalanges of the left foot have been practically destroyed, and there is some osteogenic process in some of the bones, most pronounced in the metatarsals, which has produced a mottling in the film and enlargement of the bones involved. But for all practical purposes destruction is the main feature. This picture taken in connection with the general enlargement of the foot, the sinuses and other features makes the diagnosis in this case, in my opinion, that of so-called madura foot."

Cultures were made from the peculiar "oily" blood-tinged pus exuding freely from the sinuses, and from the granules of fish roe appearance contained in the pus and from these were obtained a fungus with segmented mycelia with well-defined walls and the mycelia were broad and developed chlamydospores, thus satis-



FIGURE 1

Photograph of left foot, showing grotesque distortion, and the many sinuses.

fying the criteria for maduromyces enunciated by Chalmers. Some of the grains crushed under a cover-slip on a slide with 10 per cent sodium hydroxide also showed the characteristic picture of solid centers with radiating mycelia. The culture media used included Sabouraud's dextrose agar, plain nutrient agar, and brain-veal agar, and the fungus grew well on all, but best on the Sabouraud's medium. The routine laboratory work is not of much interest. The blood count was as follows: erythrocytes—3,600,000; hemoglobin—70 per cent (Sahli); leukocytes—14,300; differential leukocyte count: polynuclears 78; lymphocytes 12; eosinophiles 8 and monocytes 2. The urine was clear and of acid reaction, with a specific gravity of 1022, and no albumen or sugar. The microscopic was negative. The Wassermann reaction and the Butler-Meinicke test were both negative.

The foot, as can be clearly seen in figure 1, looks more like a ham than an organ of locomotion. It is at least three times the size of the right foot, which is normal. The swelling occurs in all dimensions impartially, and only the tips of the widely-separated and disrupted toes protrude from the mycetomatous mass which was once a foot. This granulomatous tumor is perforated upon both its dorsal and plantar aspects by many sinuses opening through the tops of papules elevated from six to eight millimeters above the surrounding skin, like the cones of miniature volcanoes from whose craters exudes a peculiar "oily" serosanguineous pus containing the yellowish white granules or grains of fish roe appearance. The swelling includes the entire foot but stops with the ankle joint; the emaciated leg above contrasting strangely with the swollen and distorted foot below.

It was obvious that the only chance to save this boy's life was an amputation, and this Dr. Gaston did very promptly after the diagnosis was definitely established, amputating the leg at the site of election. When



FIGURE 2

Roentgenograph of left foot, showing bone destruction, and deposit of calcium salts in tissues in osseous areas.

the foot was split open it was seen to be of a peculiar myxomatous or gelatinous structure and edematous in appearance. The knife passed through areas where bone should have been with almost as much ease as through the soft tissues, only a slight grittiness being felt. In the cut surface there was little distinction between bone, cartilage, tendon or muscle. All these had been converted into a more or less homogenous tissue through which the sinuses passed without regard to bone or other structures. These sinuses were filled with the same character of pus already described as issuing from their surfaces, but the granules lying in them were larger and yellower than those discharged from the openings.

In the microscopic sections of this tissue are the mycotic drusen of characteristic "butterfly" appearance, surrounded by a wide zone of polynuclear leukocytes. Surrounding these abscesses is a mucoid type of connective tissue containing fibroblasts, plasma cells, lymphocytes and polymorphonuclear leukocytes in fewer numbers, and also occasional eosinophiles. Only spicules of bone and deposits of calcium salts were in the myxomatous tissue to represent the former bones of the foot. The mycotic grains show the usual picture under higher magnification. The centers are almost structureless and stain poorly, while the peripheries take a deeply basic stain due to the presence in large numbers of the spores of the fungi. Around this in turn is a narrow fringe of eosin-staining mycelia. No distinct clubs can be made out, although the similarity between these drusen and those of actinomycosis is striking.

Following amputation this little colored boy underwent a change, during which his whole outlook on life was changed for the better. From a patient with a somewhat listless attitude, which he showed when he entered the hospital, he became animated and cheerful, showing plainly his joy at being at long last released from the fleshy ball and chain that had so long made him a virtual prisoner. He began to gain in weight and to show a healthier color and happier disposition. Since no other lesions were found, the chances for complete recovery in this case are good, and with properly fitted prosthesis he should be able to lead a fairly normal life.

Boccaro, in reviewing 100 cases of madu-

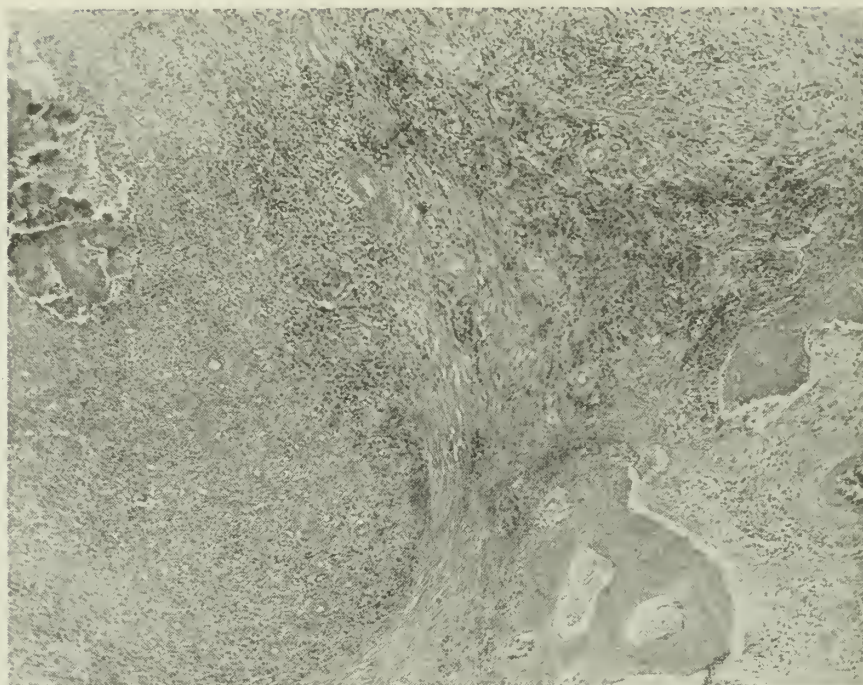


FIGURE 3
Photomicrograph taken through areas of imperfect calcification, showing spicules of bone, and mycotic drusen surrounded by inflammatory tissue. (440 X).

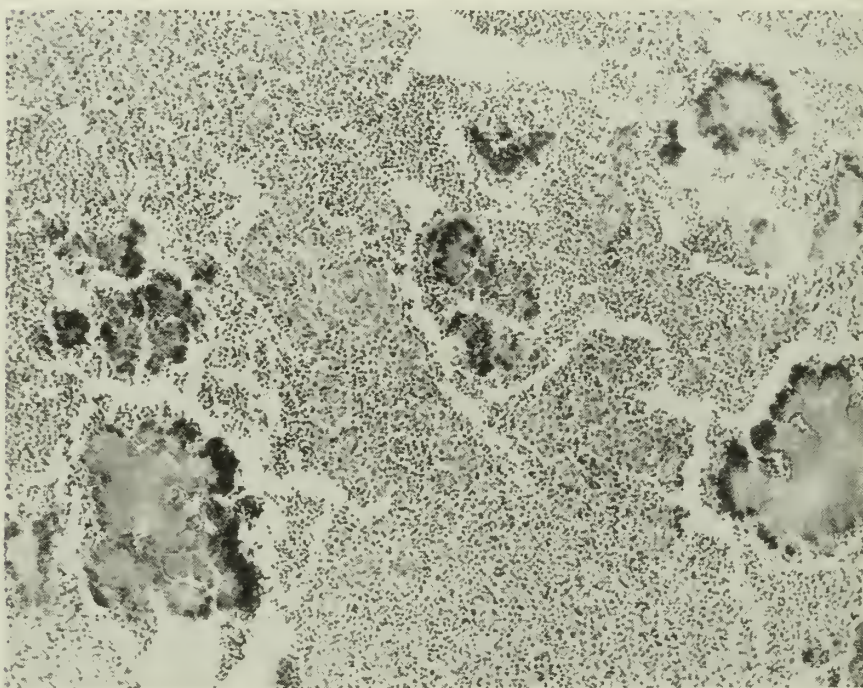


FIGURE 4
Photomicrograph showing maduromycotic grains, lying in abscess filled with polymorphonuclear leukocytes. (440 X).

romycosis occurring in the vicinity of Madura where the disease was first described, makes the following pertinent observations. In 93 cases the foot was the anatomic location of the lesion; in 3 cases, the hand; in 2, the leg; and in 2 the trunk. As regards

the sex incidence, 92 were males and only 8 females. He believes, however, that this disproportionate occurrence between the sexes is due at least in part to the fact that the majority of the dispensary patients were men. Due to the degraded position of the

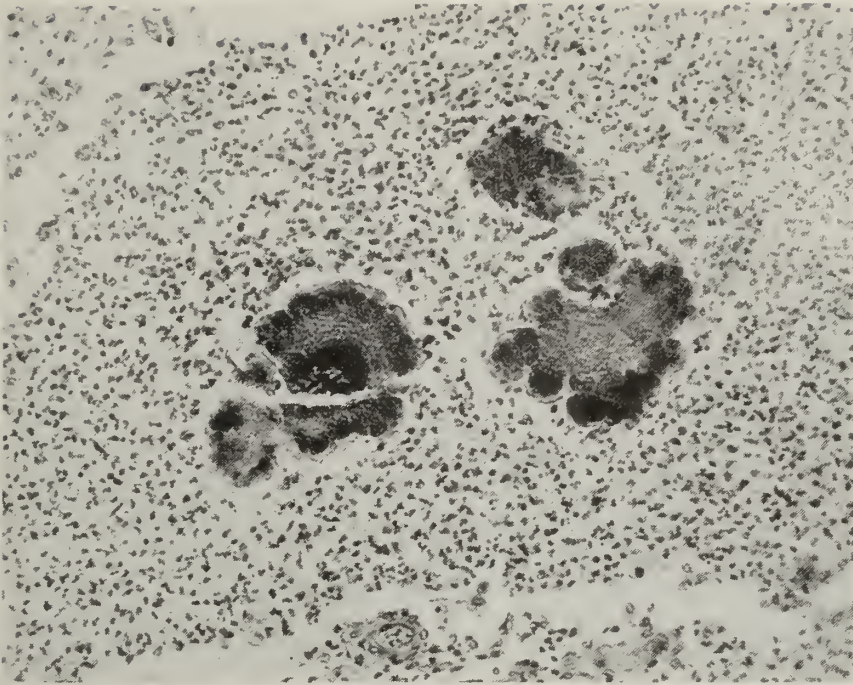


FIGURE 5
Photomicrograph of three other mycotic granules, showing greater detail. (950 X).

women in India, especially at that time, many among them probably had to suffer in silence without any medical attention. As to the age of the patients, this ranged from 12 to 80 years, but the majority of cases occurred in men between the age of 21 to 40. He further observed that most of the cases occurred in those engaged in agriculture, and that they habitually went barefoot.

Many types of culture media have been employed in propagating the fungus responsible for maduromycosis, and while some authors insist upon special media it is the consensus of opinion that the maduromyces grows well upon Sabouraud's dextrose agar, 1 per cent dextrose agar and liver infusion agar, provided the granules from the pus are seeded on the media rather than merely pus from the sinuses, which latter often results in either sterile cultures or those of secondary invaders. There is also agreement on the fact that animal inoculation by whatever method or route is almost uniformly unsuccessful. Agglutination and complement fixation tests have not given promising results as diagnostic procedures in maduromycosis.

Brindley and Howell, in 1932, were able

to collect 28 cases of madura foot that have been reported as occurring in this country, but a critical examination of these by Thompson would indicate that the majority were due to actinomyces.

As to treatment, many types of therapy have been tried with varying degrees of success reported. Amputation of the affected member is usually the only practical procedure. Recently, Dixon reported an apparent cure by sulfanilamide therapy, but since only 8 months had elapsed after this supposed cure, during which short time additional lesions had developed and again disappeared, it is questionable whether this cure is permanent, but at least it seems that sulfonamide therapy may offer some hope. That the future will have to decide, when such treatment can be better evaluated.

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THE TREATMENT OF THROMBO-PHLEBITIS

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The thrombophlebitis of surgical operation, accident, childbirth and serious illness is recognized today as a problem of the first magnitude. This venous thrombosis is one that occurs in the pelvis and lower extremities of persons put to bed because of surgical operation, childbirth, injury, or disabling disease, and which not only adds a new illness but introduces the hazard of a detachable thrombus.

Ochsner¹ uses the terms thrombophlebitis and phlebothrombosis. Clotting in thrombophlebitis is the result of injury to the endothelium from mechanical trauma, bacterial invasion or chemical injury, whereas in phlebothrombosis the intravascular thrombus formation is due to venous stasis, and to alterations in the cellular and fluid

constituents of the blood that increase the clotting tendency. In thrombophlebitis the clot is usually firmly attached to the vein wall and is not likely to become detached and result in embolism. In phlebothrombosis the clot is loosely attached to the vessel wall and is more likely to cause embolism.

PROPHYLACTIC MEASURES

Re-establishment of normal cardiovascular function. Because cardiovascular disease, with its resultant circulatory retardation, may be a precipitating factor, it is essential to re-establish the normal cardiovascular function before any operative procedure. Belt,² Henderson,³ Bauer,⁴ and many others found cardiovascular disease in many patients who had pulmonary embolism. Oberndorfer⁵ observed that of 97 fatal medical cases of pulmonary embolism, 64 had cardiovascular disease at the time of the fatal seizure. It is well known that in older persons, because of the disease in cardiovascular activity, thrombosis is likely to occur.

The vasoconstrictor effect of smoking may have some influence on thrombosis. Ochsner thinks patients should not use tobacco several days or weeks before an operation, if there is likely to be much trauma.

In varicosities of the legs thrombosis must be considered. The importance of varicosities in thrombophlebitis has been frequently emphasized. For this reason they must be corrected preoperatively, or compression bandages worn in the early postoperative period. The value of compression bandages and early ambulation in thrombophlebitis of the superficial veins was first emphasized by Fischer.⁶ Much can be accomplished by compression bandages even in those patients who have no varicosities.

Hydration. The replacement of fluid as a preoperative and postoperative measure is imperative because dehydration and the increased viscosity of the blood predispose to thrombosis.

Operative procedures. Careful handling of tissues is important. Sharp dissection results in less trauma than blunt dissection.

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Proper clamping of the vessels and avoidance of mass ligation of tissue should be practiced. Absolute hemostasis is essential because absorption of blood from a wound gives rise to proteid disintegration products. Ochsner has found that he had less tissue reaction when using cotton sutures.

Avoidance of contamination. Infection should be avoided because of its effect on intravascular clotting. The destruction of tissue from infection causes the liberation of large quantities of split proteins which may induce thrombosis.

Prevention of circulatory collapse. Patients who are submitted to extensive operative procedures with considerable trauma, particularly if there is much loss of blood, may develop circulatory collapse.⁷ It may be necessary to give vasoconstrictor drugs, blood transfusions or saline solution to prevent venous stasis which would predispose to thrombosis. Avoid chilling. Chilling increases the viscosity of the blood as shown by Barbour and Hamilton,⁸ who demonstrated that exposure to cold causes a loss of fluid from the vascular channels into the tissues.

Posture. The posture of a patient either postoperative, postpartum or after a prolonged illness is of great importance in preventing or causing thrombosis. Postures that cause slowing of the blood stream should be avoided, because they may cause thrombosis. Those postures which increase the flow of blood should be used. Fowler's position retards the return flow of venous blood, by flexing the thighs on the abdomen, the legs on the thighs and causes a kinking of the veins in the popliteal space. However, Friedlander⁹ has shown that flexion of the thighs on the abdomen does not produce compression on the femoroiliac vessels but favors the return flow of blood. This may be accomplished by elevating the foot of the bed or by elevating the foot and leg and flexion of the thigh on the trunk at an angle of 45°. Elevation of the foot of the bed to prevent vascular retardation is the best posture.

Mobilization. Immobility of a bedridden patient is undesirable for several reasons. Cardiovascular activity is lessened,

which favors thrombosis. Muscular inactivity also tends to cause venous stasis and may result in clotting.

Early ambulation. Early ambulation of the patient postoperatively is favored in most continental clinics. Campeanu¹⁰ reported 1300 cases, many of which were severe, in which the patients were allowed to walk directly from the operating room to the ward and to take gymnastic exercises immediately afterward, including even jumping. Patients who have had resections of the stomach are allowed to sit on the edge of the bed on the afternoon of the operation, and to sit in a chair the following day. Zava¹¹ has used this method in 6,000 operations without a single case of embolism, although many of the cases were gynecologic or other pelvic procedures. He gets his patients up on the first or second day, and, if this is impossible, he keeps them in bed until the second week because he believes that embolism is likeliest to occur between the third and thirteenth days.

Respiratory stimulation. The negative pressure within the thorax favors the return of venous blood to the heart. It is the custom in Ochsner's clinic¹² to have postoperative patients take at least ten *deep* breaths every hour. Because opiates depress respiration, they should be given sparingly.

Abdominal tension. Increased intra-abdominal pressure retards the circulation in the abdominal veins and lower extremities. Tight abdominal bandages increase intra-abdominal pressure. Flatulency also increases abdominal tension and causes venous stasis. In patients in whom clotting is likely to occur, compression bandages should be worn.

The use of anticoagulants as prophylactic measures has become popular. Priestley, Essex and Barker¹³ in this country, Murray and Best¹⁴ in Canada, and Crafoord¹⁵ in Sweden have used heparin prophylactically to prevent thrombosis and embolism. They found that by giving heparin intravenously for several hours it was possible to decrease the coagulation time. Good results have been reported from its clinical use. Murray and Best used heparin post-

operatively in 315 patients, none of whom developed thrombosis or embolism. Kriener¹⁶ suggested sodium citrate intravenously to diminish the coagulation time. Evans¹⁷ has given dicoumarin orally to prevent thrombosis. Dicoumarin is obtained from sweet clover.

Therapeutic measures. By the use of the preceding prophylactic measures, many cases of thrombophlebitis and embolism can be prevented. The prognosis and therapy depend on the type of the lesion and its location. Of great importance is the differentiation between thrombosis in superficial and deep veins.

Superficial thrombosis. In cases of thrombophlebitis in the superficial veins, the treatment consists of applying a compression bandage from the toes to the groin, to prevent propagation of the thrombus. These patients should be required to walk and not be allowed to remain in bed. Thromboses in varicose veins, when the Trendelenburg test is positive, should have resection and ligation of the great and small saphenous vein where it empties into the deep veins. This procedure will prevent embolism and recurrence of the thrombosis which is so frequent in large varicose veins.

Deep thrombosis. In patients in whom there is an inflammatory involvement of the vein, with fever and leukocytosis, the surface temperature is decreased. However, in thrombophlebitis in a superficial vein the skin is red, and the surface temperature is increased. The coldness and pallor in the area of involvement, in the presence of inflammation and fever, are caused by spasm of the arterial system although the lesion is in the deep vein. This was the conclusion of Ochsner¹⁸ after both animal and clinical investigations.

The treatment of thrombophlebitis of the deep vein can be divided into two categories: conservative therapy and radical therapy. Elevation of the extremity should be carried out because it aids the return flow of blood and tends to decrease the propagation of the thrombus. Immobilization is undesirable. Bandages should be applied from the toes to the inguinal region. Muller¹⁹ says that bandages have decreased

the incidence of fatal embolism from 15 to 2.3 per cent. He believes that compression re-establishes the competence of the valves and favors the attachment of the thrombus to the vein wall. In his experience the use of the compression bandage decreased the convalescent time from six to eight weeks to eight to twelve days. Fischer²⁰ used this type of therapy in several thousand cases and has never had a fatal embolism. The application of heat postoperatively is beneficial in deep and superficial thrombophlebitis. Termier²¹ in 1922 is credited with the revival of treatment of thrombophlebitis by leeches. Hirudin, which is secreted by the leech's salivary gland, can prevent coagulation of blood.

Heparin has no value as far as the clot already formed is concerned, but by decreasing the coagulation time it will prevent the propagation of a thrombus. The heparin is administered by continuous intravenous injection, and the dosage is regulated so that the clotting of the blood is maintained between fifteen and twenty minutes. The patient is kept in bed seven days on the average. After three or four days active exercises in bed are encouraged. Murray³² reported 81 cases of phlebitis in which heparin was used. The results were good, and no patient developed embolism.

Ochsner²³ states that in his experience the best method of therapy in thrombophlebitis of the deep veins is the production of vasodilation by blocking the regional sympathetic ganglion with 1 per cent procaine hydrochloride, as suggested by Leriche in 1934. The technic of lumbar sympathetic block is as follows: The patient is placed in the lateral recumbent position. A barbiturate or opiate should be given in order to allay any apprehension on the part of the patient. With the affected side up the skin is prepared and the back draped. Skin wheals are made 4.5 to 5 cm. lateral to the upper part of the spinous processes of the first, second, third and fourth lumbar vertebrae. A 20 gage lumbar puncture needle 10 cm. in length is used for the sympathetic block. Each needle is inserted vertically until the transverse process of the

vertebra is reached. The needle then passes over the transverse process and is pointed slightly toward the midline. After the needle is inserted for another 3 to 4 cm. in this direction, it will impinge against the anterolateral surface of the body of the vertebra in the retroperitoneal space. After careful aspiration to insure against intravascular injection, 5 cc. of 1 per cent procaine hydrochloride are deposited at each site. Following the injection the leg feels warmer, pain is decreased and arterial pulsations improve.

Twenty-five patients have been treated in the past two years with good results in the acute cases of thrombophlebitis: 5 developed phlebitis postpartum, and 20 developed phlebitis postoperatively. Two patients had bilateral involvement. The time interval of the development of the thrombophlebitis until sympathetic block was done varied from three days to six years. The results were only fairly good in the chronic cases. Ten patients received one treatment and 15 two or three treatments. Sympathetic block should be done daily until the temperature returns to normal, because as long as fever persists vasospastic impulses can originate in a thrombophlebitic segment.

In phlebothrombosis of the deep veins, when there are few objective symptoms except a rapid pulse, if embolism occurs it is sometimes necessary to ligate and divide the femoral vein to prevent further propagation of the thrombus. When pain is complained of it is usually in the calf of the leg or in the sole of the foot, because as Neumann²⁴ has shown, the thromboses are generally limited to the veins of the calf or foot. Of greater importance than spontaneous pain is that obtained by pressure on the plantar surface of the foot, on the inner side of the foot below the internal malleolus or in the calf, or by forced dorsiflexion of the foot in the popliteal region, Homan's²⁵ sign. One may make a diagnosis of thrombosis of the deep veins in the calf of the leg by injecting diodrast into a small vein on the external surface of the ankle as described by Starr, Frank and Fine.²⁶ The venogram will aid in determining the

patency or blocking of the deep veins.

The diagnosis is made upon the clinical events described in the preceding paragraph. Treatment varies with the stage at which the disease is first seen. If the patient has just complained of lameness, edema, cyanosis of the foot and pain on dorsiflexion of the foot, conservative measures should be tried. The foot of the bed is elevated about six inches and a pillow is put under the affected leg. No restriction is placed on movement of the leg, but no attempt is made to exercise it.

Elevation is continued for ten days or until all soreness and edema have disappeared. The next four or five days are spent in gently exercising the muscles of the leg, with the patient in bed. Then the patient begins to get up, wearing a semi-elastic bandage from the toes to the knee. If the edema and cyanosis persist, or if the patient has not been seen during the first few weeks and has had recurrent attacks, it may be necessary to divide the femoral vein. It is thought that thrombosis may still be active in these cases, and that a propagating thrombus may be growing up the femoral vein. One might think that division of the femoral would cause cyanosis, but it does not. On the contrary, the foot becomes warmer and perhaps pinker than the other.

Division of the femoral vein is performed under local or spinal anesthesia. A 10 to 12 cm. incision is made parallel with the femoral vein. The great saphenous vein is not disturbed. Should a thrombus be encountered proximal to the division of the femoral vein it should be removed by suction. Bandage should be worn for some time after the patient is allowed to walk.

NOTE: Since this paper was presented I have ligated the femoral vein in two patients. One of these patients developed a pulmonary embolus two weeks postpartum. A venogram showed a filling defect in the deep veins of the affected side, the right leg. At operation the femoral artery was found to be greatly contracted but it dilated after the sheath was dissected from around the vessel. The femoral vein was ligated and severed distal to the profunda. Two weeks later the patient developed thrombophlebitis in the left leg. A lumbar sympathetic ganglia block was done on the left side and the patient made an uneventful recovery.

The other patient, an elderly physician, developed a

phlebothrombosis in the deep veins of the calf of the right leg, following an attack of virus pneumonia. There were marked edema, bluish discoloration and severe pain. The femoral vein was ligated and immediately the blood supply became greatly improved, and the pain was relieved. He also made an uneventful recovery.

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DISCUSSION ON PAPERS OF DRs. D. R. VENABLE AND JOSEPH H. GASTON, AND DR. CHAS. E. RUSHIN

Dr. Charles H. Richardson (Macon): I would like to add just a word in the discussion of Dr. Rushin's paper on the Ochsner treatment of thrombophlebitis which, I feel, represents a very distinct advancement.

I am sure that all of you are familiar with the disabling effects of thrombophlebitis, the long treatment consisting of immobilization and rest in bed and the general undermining of health.

Dr. Ochsner devised the idea of injecting 1 per cent procaine hydrochloride solution into the lumbar sympathetic ganglia and thereby relieving the spasm which occurs in the venous and arterial walls.

The possible objection to this treatment, which carries with it the idea of mobilization of the limb, is that of the possible loosening of the clot in the vein. However, I had the opportunity sometime ago to discuss this mat-

ter personally with Dr. Ochsner and he states that this does not occur. He says that the clot in acute thrombophlebitis is so tenacious that embolism does not occur. Cases of embolism which I have seen did not occur in acute thrombophlebitis but rather in patients who were getting well and where there was nothing to make you expect embolism.

Just a word about the technic of this method. It is very simple and anyone can do it. You take as landmarks the spinous processes of the 1st, 2nd, 3rd and 4th lumbar vertebrae and go two finger breadths outside on the affected side. At these points, four skin wheals are made with 1 per cent procaine solution. Then an 18 gage needle about 3½ inches long is introduced until it strikes the transverse process. Then you elevate the needle and go two finger breadths inward and bearing toward the midline until the point impinges against the anterolateral surface of the body of the vertebra in the retroperitoneal space. After all four needles are placed, you take a 30 cc. syringe containing 1 per cent procaine solution and deposit 7.5 cc. at each site. The needles are then removed and the patient's pain is instantly relieved, he is perfectly comfortable, and you encourage him to place his foot against the footboard of the bed and push downward. In a few days he can get out of bed.

You would think that the injection does not last long enough to give any permanent relief but he is comfortable for about 24 hours and you repeat the treatment every day as long as there is fever, pain, and spasticity. In about a week of ten days, the patient can be sent home comfortable and will remain so; and the cases which it used to take weeks to relieve are perfectly comfortable in a week and can walk on the leg.

Dr. Chas. E. Rushin (closing): I appreciate Dr. Richardson's discussion of my paper. My object in bringing the subject of thrombophlebitis before you is to emphasize the importance of prophylactic measures as well as the lumbar sympathetic block for relief of symptoms after the disease has developed.

Frequently patients are brought to me several days after they had thrombophlebitis, and they have ulcers, brawny induration, marked edema and eczema. Something can and should be done in the acute stage to prevent these crippling sequelae.

Industrial employment must be deferred for job applicants with active tuberculosis. Since the employer has an obligation to the community with respect to rehabilitation, activity of tuberculosis lesions developing during employment should indicate a furlough for treatment; not termination of employment. The criteria for the recurrence of activity should include not only roentgenological evidence, but also increases in sedimentation rate or febrile reaction. Although these patients might not be passing infection to others at the time, employment would be against their own best interests and a serious potential danger to others. Wayne L. Rutter, M.D., and J. W. Duggar, M.D. *Indus. Med.* Jan. 1944—NTA Clip Sheet.

Fatigue spans the arch between health and disease. We know that artificially exhausted animals are more susceptible to pneumonia—that tuberculosis is in part a fatigue problem. *M. Z. Gross. Hygeia*, October 1942.—NTA Clip Sheet.

THE IMPORTANCE OF RECTAL EXAMINATIONS

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Although proctology has been definitely established as a specialty in the practice of medicine for many years, there still seems to be a lack of interest in this work not only among the more recent graduates in medicine but among the established general practitioners and the general surgeons. The percentage of proctologists scattered over the country is small in comparison to the number of specialists in almost any other medical group. This should not be the case but it is true. From a personal point of view, I have never found this type of work to be as disagreeable as it is thought to be by some physicians.

Since there are so few specialists in this line of work, it necessarily means that the great majority of rectal examinations and surgical treatments are done by the general surgeon. Still a much greater amount of rectal work is left undone, however, because the general practitioner, who hears more rectal complaints, attaches very little significance to rectal symptoms. When told that bleeding from the rectum has been noticed or that there is pain associated with bowel movements, the doctor will usually prescribe a suppository or an ointment with the statement that "you have the piles." No attempt is made to secure an accurate history or to even insert the finger in the rectum, much less look into the rectum through an anoscope or proctoscope to try to determine what is causing the pain or the bleeding as the case may be. The patient, without further conversation, is advised that the condition will probably clear up within a few days. Maybe it will but the chances are that it will not. If the physician attaches no significance to a rectal complaint, why should we expect the patient in particular or the people in general to do so. The physician as well as the public must be educated to the fact that the rectum deserves as much attention as any other part

of the body. Certainly a sore throat would be looked at, an acute abdomen would be palpated or the stethoscope would be used in the case of a respiratory infection. Rectal conditions are neglected, however, by both the doctor and the patient. Both parties can be justly criticized.

Most individuals, and women in particular, are somewhat secretive about abnormal rectal conditions. It is surprising how long an individual will be troubled before consulting a physician. Some attempt should be made to educate the public as to the seriousness which can be caused by neglect. Something has been accomplished along this line recently by the educational program sponsored by several insurance companies and also in the educational programs sponsored by the Women's Field Army of the American Society for the Control of Cancer. Until recently, to mention venereal diseases on the radio or in the newspaper was looked upon with disfavor but now the same subject is written up on the front pages, referred to over the radio and discussed freely in the best circles. Possibly it will take something along this line to stress the importance of rectal symptoms. If this should happen, then the physician will be forced to listen with interest to the patient's story and then do a rectal examination.

In considering what has just been said one might ask the question: What are the indications for a rectal examination? This can be answered by stating that anything that the patient has seen or experienced which makes him conscious of the fact that he has an anus or rectum is indication for a rectal examination. A person with a normal rectum or anal outlet is no more conscious of the fact that he has an anus than he is conscious of the fact that he has a nose or ears. When anything is noticed, no matter how trivial, which makes the patient conscious of the presence of his anus or rectum, then we should know that some abnormality exists. I do not mean to imply that all symptoms relating to the rectum are serious, but I would like to emphasize the importance of investigating any abnormal condition. Anything abnormal

about the usual habits of elimination is indication for rectal examination. One of the most striking examples of this kind that I am familiar with was a patient 55 years of age who came to see me because he had noticed for the past few weeks that he was somewhat constipated. There was no pain, no bleeding, nor anything except constipation. On inserting the finger into the rectum a mass could easily be palpated. Biopsy revealed an adenocarcinoma of the rectum. A resection was done and the patient is well and happy after seven years.

The symptom to which I attach more importance than any other is bleeding. The patient giving such a history is done an injustice if he is sent home without having been given a complete rectal examination. It is true that the majority of patients having bleeding as a symptom probably have internal hemorrhoids. Remember that internal hemorrhoids are not the only cause of rectal bleeding and also remember that, even though the patient may have internal hemorrhoids, some other condition may coexist. This was demonstrated to me very clearly only recently. A young lady, 30 years of age, came to my office with the chief complaint of having had two profuse rectal hemorrhages. The first hemorrhage came at night and she was immediately rushed to the hospital and admitted as a patient. She was seen and ordered for by her private physician. The following morning the hemorrhage had ceased and a rectal examination was done. Large internal hemorrhoids were found and she was so advised and sent home with instructions to return in a few days for hemorrhoidectomy. One week later she had another rectal hemorrhage and the same procedure was gone over again, with admission to the hospital for 48 hours. Again she was told that her hemorrhoids would have to be removed. She was allowed to go home for a few more days. One week later she came to my office and related the history as I have just given. Rectal examination revealed large internal hemorrhoids. These hemorrhoids were certainly large enough to cause rectal bleeding but in this case there had been no bleeding associated

with bowel movements. Also the patient stated that she passed what looked to her to be about a quart of blood. There were several clots of blood passed also. This certainly was indication for further examination. A sigmoidoscopic examination was done and about 18 cm. above the anal outlet a small ulcerated mass was found. Biopsy of this mass revealed an adenocarcinoma. A resection was done and the patient is now living and in good health. We can all picture the bewilderment of the physician had the hemorrhoidectomy been done and the hemorrhage continuing, the patient dying several months later from an inoperable carcinoma of the sigmoid.

This case necessarily required the use of the sigmoidoscope in order to make a diagnosis. This should not be attempted by anyone not familiar with the procedure. It should not be done by the average practitioner but the patient should be referred to a physician equipped to do such examinations. It is better to refer the patient to someone else than to draw an unjustified conclusion as to the cause of the hemorrhage.

Another indication for a rectal examination is the patient who requests a complete examination. A complete examination has not been done unless the anal canal has been examined digitally and also viewed through the proctoscope. In my opinion, rectal examination is of such importance that, before many years, insurance companies will require routine rectal examinations on applicants above 40 years of age who apply for insurance above certain amounts.

Although not as important as the examination itself, a careful and complete history should be obtained in every case. This will give the physician a lead as to what to expect to find on examination. The history obtained in a case of rectal ailment is as important as it is in any other type of disease. It must be emphasized, however, that no diagnosis should ever be made without a thorough examination since, as already stated, there may be more than one pathologic condition existing.

The average physician may conclude that

he is unable to make an examination and diagnosis of rectal conditions because he has had no experience in such procedure. This may be very true but we are speaking of the rectal examination and not the sigmoidoscopic examination. Most physicians do not do rectal examinations because they have never done one. I venture to say that a good percentage of doctors do not know what a normal rectum looks like because they have never looked into one. It can be said, however, that unless a doctor examines a few patients with a normal rectum and familiarizes himself with the normal, then he will not be able to recognize the abnormal condition when it does present itself. It would be little trouble to the doctor and no discomfort in particular to the patient if a rectal examination would be made on all patients presenting themselves for general examination. In this way it would be only a short time before the physician could thoroughly familiarize himself with the normal appearance of the rectum. Both digital and proctoscopic examination should be done because each will demonstrate conditions which the other will fail to do. For instance, digital examination will not be of diagnostic aid in a case of mild internal hemorrhoids. Internal hemorrhoids, when palpated, will flatten out against the rectal wall and cannot be felt. A proctoscopic view will demonstrate them plainly. In the same manner, a proctoscopic view may not reveal an abscess but on digital examination it is readily recognized.

Of all pathologic conditions known to exist in the descending colon, sigmoid and rectum, about 75 per cent are found in the rectum, anal canal and anal outlet and can be demonstrated by rectal examination. It is said that 90 per cent of malignancies of the large bowel are within the reach of the finger when doing a digital examination. If this is true, then I should think that every doctor would be equipped and capable of making a rectal examination and diagnosis. If no disease is found in the anal canal and rectum to account for the symptoms, then the patient can be referred to capable hands for a sigmoidoscopic examination.

One criticism that I would like to make here is that too many patients are referred to the roentgenologist for barium enema and x-ray examinations before any attempt is made to examine the rectum otherwise. X-ray examination is of benefit only when a lesion is higher than can be reached with the sigmoidoscope. If x-ray examination is to be made, always precede the examination by the visual examination because it is very difficult to empty the bowel of the barium under three or four days after it has been instilled. If a visual examination is done first, then a good percentage of x-ray examinations will not be found necessary.

I have presented nothing new to you. I hope that any criticism which I have offered has been constructive rather than destructive. I have tried to keep the welfare of the patient in mind, believing that any ill person who consults a physician should be given the benefit of all the resources that the doctor has at hand for making a correct diagnosis. The earlier any pathologic condition is recognized, the more easily it can be remedied. The lives of countless individuals have been lengthened by many years due to the early diagnosis and proper treatment of malignancies. Many days of suffering have been saved the patient by an early diagnosis and proper treatment of irritable ulcer or fissure. Many complicated fistulas have been avoided by early recognition and treatment of a simple fistula. Many people have been restored to health and usefulness by the early diagnosis and treatment of the most common rectal ailment, hemorrhoids. All that is necessary in most cases is a thorough rectal examination. Further education of the patient will, of course, be necessary in order to get the patient to consult the physician early. Just as important, however, and possibly more so, is the education of the physician to the realization of his responsibility to his patient by either doing a rectal examination or referring the patient to someone who will give him such an examination, and not send him home with a prescription and the consoling advice that "everything will be all right in a few days."

If a patient attempts to get relief and

pays a doctor for his services and advice, then he is entitled to the best service the physician can render. The physician should do his utmost to be of some benefit to the patient who has come to him concerning his physical wellbeing and, in many cases, concerning the thing which is dearest to us all, and that is life itself. It behooves us all to give our patients our best services.

I thank you for your indulgence and I hope that I have stressed, in some measure, the importance of rectal examinations.

553 Walnut Street

TREATMENT OF HEMORRHOIDS

HULETT H. ASKEW, M.D.*
Atlanta

There are two scientific methods for treating hemorrhoids: the injection treatment and the surgical removal. The injection treatment can be accomplished by 5 to 10 per cent phenolized vegetable oil or 5 to 10 per cent quinine and urea. They are standard universally used preparations. The only type of hemorrhoid that can be injected successfully is the internal hemorrhoid. This procedure is gradually losing its popularity due to:

1. To increased popularity of hospital insurance.
2. Distance and lack of transportation.
3. Uncertainty of permanent cure.

I am of the opinion that the modern injection treatment of internal bleeding, and first and second degree prolapsed internal hemorrhoids without pathologic changes, that is, papillae, fissure, thrombosis and fibrous tissue, is an ideal treatment and patients can be permanently cured by this method. This is readily admitted to be a valuable palliative measure to control hemorrhage and to prepare a patient for surgical procedure. It is certainly the choice procedure in far advanced pregnancy, severe cardiacs, nephritics, diabetics and very elderly patients, and in all conditions where operation is hazardous or impractical.

It is true that often patients who have been injected for years eventually submit to hemorrhoidectomy because their cases were not the type for injection therapy at the beginning, or the physician did not use enough solution to result in fibrosis from the inflammatory reaction into the submucosa above or into the lumen of the hemorrhoid. The phenolized oil solution should always be injected submucosally; the quinine solution and phenol in glycerin into the center of the hemorrhoidal plexus.

In conversation with Major Tom Smith of Dallas, Texas, I learned that he had been injecting hemorrhoids in the Army after much persuasion by his superior officer. The soldiers would enter the hospital and he would inject the entire hemorrhoidal zone at one sitting, special attention being given to the three primary hemorrhoids; that is, 5 cc. left middle hemorrhoid (or 3 o'clock); 5 cc. right posterior hemorrhoid (or 7 o'clock), and 5 cc. right anterior hemorrhoid (or 11 o'clock). Any secondary hemorrhoids were injected using 3 to 4 cc. for each hemorrhoid, using in all at the first treatment a total of 25 to 30 cc. of 5 per cent phenolized vegetable oil. After remaining in the hospital 48 hours the soldiers were returned to regular duty. Over a hundred patients were treated with this method. Most of the soldiers remained in camp for eight months with only five returning for any further treatment. Dr. Smith emphasized that these cases were properly selected and were true internal bleeding hemorrhoids, with first and second degree prolapse and without other complications.

It is my opinion that sclerotherapy will continue to be popular with physicians themselves when they have hemorrhoids, because of the freedom from pain and loss of working time, as well as not requiring hospitalization. Therefore, in the properly selected cases, the same enthusiasm should exist with this method as does exist in surgery, and many previously hemorrhoidectomized patients with poor results can have good results with proper injection therapy if the external hemorrhoids and

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*Died Feb. 20, 1944.

skin tabs have been properly removed previously.

Surgical Removal

Competent rectosigmoidal examination by means of the electrically-lighted sigmoidoscope must be conducted previous to any anorectal operation. By this means rectal malignancy can be discovered in the early resectable stage. Physicians can no longer shirk their responsibility to diagnose cancer of the lower bowel early, especially when rectal bleeding is a prominent symptom.

It is the exceptional patient who submits to operation with only three primary hemorrhoids involved. After many years of self-medication and perhaps an unsuccessful course of sclerotic injections, the patient usually comes to operation presenting a veritable ring of prolapsed ulcerated, internal hemorrhoids, hypertrophied papillae, mucosal fissuration and numerous skin tabs. Faced with such a formidable array of lesions, the inexperienced surgeon, fearing postoperative stricture as a result of excessive tissue loss, wisely concludes that discretion is the better part of valor and removes only the larger varicosities. Revision operations in such cases are frequent.

The patient to undergo rectal surgery should omit one meal prior to operation: He should enter the hospital early enough to permit unhurried preparation. The bowel may be prepared by the administration of a weak soda colonic irrigation until the returns are clear. The anal hair is clipped close but not shaved. Adequate sedation is administered to insure sound sleep. I administer $1\frac{1}{2}$ grains of nembutal two hours before the patient is taken to the operating room. Just before he goes to the operating room I administer a hypodermic of $\frac{1}{4}$ grain of morphine sulphate. This medication is used with local, sacral, caudal or spinal anesthesia. If sodium pentothal anesthesia is to be used, $\frac{1}{4}$ grain of morphine sulphate with $1/150$ grain of atropine sulphate is administered one hour before operation. All phenobarbital preparations and hyoscine are omitted in pentothal anesthesia. It is immaterial what an-

esthetic one uses as long as complete relaxation is secured. I prefer low lumbar anesthesia first; second caudal, using 25 cc. of $1\frac{1}{2}$ per cent solution of metycaine in the caudal canal. If these are objectionable to the patient, local infiltration of $1/1000$ nupercaine solution or, if loss of consciousness is desired, sodium pentothal intravenously is used.

The comfort of the patient, of the surgeon and his assistant during the operation is enhanced by maintaining the patient in the prone, slightly inverted, jack-knife position. The patient's hips are only elevated 8 to 10 inches above the level of the rest of the body, usually by means of a padded kidney rest. The buttocks are separated by wide adhesive straps attached there and thence to the frame of the table. The area is prepared with metaphen and draped. The anal sphincter is found to be relaxed and easily admits three fingers.

Numerous methods for surgical removal of hemorrhoids have been described. The so-called "ligature operation" fulfills all the requirements of a satisfactory operation for hemorrhoids. This operation in principle was originated 100 years ago by Mr. Colomon, founder of St. Mark's Hospital for Rectal Diseases, in London.

The laity and physicians alike recall the frightful pain and the discomfort of prolonged obstipation which followed hemorrhoidectomy by the now obsolete clamp and cautery method and the barbarous "whistle" plug necessitated for hemostasis. I believe a hemorrhoid which has been excised cannot recur. Hemorrhoids which occur following hemorrhoidectomy must be due to physiologic enlargement of the varices and prolapsed mucosa left intact after an inadequate, incomplete operation.

Technic for Removal of Chronic Hemorrhoids

I attempt this operation without the use of speculums or retractors. A triangular or Allis forceps grasps the perianal skin at four equidistant points. Two forceps are placed on each of the lateral anal edges and one anteriorly and one posteriorly. Inasmuch as most internal hemorrhoids are

also accompanied by some external as well, it may be necessary to place these forceps on the external skin folds. These are to be excised later, so no concern should be felt about this.

Traction on these four everting forceps will expose the entire operative field in a way not possible by the employment of speculums or retractors. No part of this area is obscured by any part of a speculum or retractor. The relation of each hemorrhoidal mass to the others can be accurately observed.

Inasmuch as most hemorrhoids occur in three constant areas they can be removed in three groups. These groups are the right anterior, right posterior, and left lateral.

With the patient lying on the abdomen, the most dependent group would be the left lateral one, and this is the first one to be removed. The hemorrhoidal mass is grasped at its outer extremity with the Hirschman pile forceps, or a similar instrument, and a small round curved needle, threaded with No. 1 plain catgut is passed in through the mucous membrane on one side, down to the base of the hemorrhoid, and around the opposite side in such a manner as to include the upper half of the mucous membrane covering the pile and surrounding all blood vessels underneath. This ligature should be placed just at or above the junction of the hemorrhoid with normal mucous membrane. It is then firmly tied, thus securely shutting off the blood supply of the hemorrhoid.

The right anterior and the right posterior hemorrhoidal groups are treated in like manner. The ligatures are left long and are held out of place by hemostats. After all ligatures have been placed, the left lateral hemorrhoid is again clasped with hemorrhoidal forceps and an elliptical flap excised, sufficiently large to expose all clots and varicose veins composing the hemorrhoid. Some of these veins and clots may come away with the flap.

All other hemorrhoids are carefully dissected out until the sphincter sheath is exposed. Should there be any arterial spurring, usually from the mucosal walls, the hemorrhage is controlled by No. 1 plain

catgut ligatures. As a rule, there is no such hemorrhage because of the control of hemorrhage produced by the three original ligatures. The right anterior and right posterior hemorrhoids are excised in the same manner. Care should be used not to excise any more of the normal mucous membrane overlying the hemorrhoidal mass than is necessary to expose the pathologic lesions. When each of these operative wounds contract, they appear to be but slits or "buttonholes." The cut edges are allowed to fall together without suture.

The hypertrophied external skin folds, whether they contain thromboses or not, are excised to the anal aperture. All veins between the incisions are undercut beneath the mucous membrane inside, and subcutaneously outside. All of these radial wounds are tapered, so that no cupping occurs. A tapered wound not only drains well but reunites better and prevents edema.

Twenty per cent ethyl alcohol in water is injected at numerous places around the anus into the external sphincter muscle.

A strip of rubber tissue with some analgesic ointment is inserted into the canal and a compression dressing applied. The patient is given a minimum residue and fluid diet, and is allowed to leave his bed within 24 hours if necessary. Rubber tissue is removed at the end of 24 to 36 hours and the patient is given hot Sitz baths twice daily. Dialudid and morphine are given if necessary.

The usual period of hospitalization runs from three to seven days.

Treatment of Acute Hemorrhoidal Conditions

It was formerly thought that thrombosed, prolapsing hemorrhoids were due to strangulation, produced by the sphincter muscle, but this idea is gradually giving way to the more tenable theory that the resulting lesion is one of trauma. The various descriptive terms, such as prolapsed, thrombosed, strangulated, and gangrenous hemorrhoids refer merely to pathologic changes and to changes in position of lesion. There is one common finding in strangulated hemorrhoids and that is thrombosis of the arteries, veins and capillaries making up

the hemorrhoid. The fear of embolism, the fear of liver abscess and the fear of stenosis following operation all are unjustifiable. It has been observed that more emboli and infection developed in the unoperated cases than in those operated on. There are certain surgical principles that should be carried out in detail and these are:

1. The anesthetic should be away from site of operation. Use no local infiltration.
2. Have complete rectal dilatation and use no retractors or speculum.
3. Use no cauteries or clamps.
4. Excise completely all pathologic tissue.
5. Use sulfanilamide and sulfathiazole crystals in the wound.

Strangulated, thrombosed, sloughing and gangrenous hemorrhoids should be operated upon promptly. The danger of embolism or liver abscess is greater in those cases not operated upon than in those cases operated upon under bloc anesthesia, pentothal anesthesia without clamps and without clamps and cautery and without anal dilatation.

DISCUSSION ON PAPER OF DR. HULETT H. ASKEW

Dr. J. W. Palmer (Ailey): I want to thank the essayists for those two valuable papers. I think they are the most practical papers read before this session of the Association. More patients come into our offices suffering with rectal diseases, especially hemorrhoids, than any others excepting venereal diseases and diseases of children.

The first doctor I ever knew who specialized in treatment of hemorrhoids was Dr. Farmer of Savannah. The second doctor whom I knew to specialize in this work was Dr. Pruitt of Atlanta. I consider Dr. Pruitt a pioneer in this work. When he began his work some of the profession criticized him and he had hard knocks and daggers thrown at him, but he soon demonstrated to the profession that he was right.

I particularly want to thank Dr. Phillips for his paper on "The Importance of the Rectal Examination." The only criticism I have on his paper is that he did not read it twenty-five years ago. If he had he would have saved me great embarrassment.

Twenty-five years ago a lady of prominence came into my office and said she had the piles and wanted relief. I told her salves would not cure them, but if she would go down to Dr. Farmer in Savannah he would cure her. She said she would if I would go with her. I took her to Dr. Farmer and after he examined her he said she did not have piles, but had a fecal bolus. We took her to the hospital and he removed the bolus. I could not

sleep that night, thinking that this lady was taken to the hospital by me to have hemorrhoids removed and did not have them, and when she returned home everybody would find out and say Dr. Palmer can't tell when you have piles.

Next morning I went by the hospital to tell her goodbye and as I started out she called me back and said when you get back home please don't tell anybody what I had. I told her I certainly would not and for her to keep it a secret also.

Dr. J. G. Standifer (Blakely): Just a few remarks from a country doctor, for he is the one to sift these cases and find those that should go to the surgeon and those who cannot or will not and must be handled by the family doctor.

Many of my patients think they have liver trouble. They are eternally taking "liver medicine." As a consequence, they have more or less hemorrhoids.

Now, in my opinion, the palliative treatment of hemorrhoids does have a place. We have got to give these people some relief. Lots of them are not able to go to the proctologist or surgeon for the simple reason they are not financially able to go anywhere. Internal hemorrhoids can and do bleed profusely; I recall a school teacher whose hemoglobin dropped to less than 40 per cent.

Recently I had a patient who came with severe pain in the lower bowel. Having come to the conclusion, after thirty years of practice, that it is wise to inspect and examine these patients, else later events make a fool of you, I found this man to have a fishbone hung straight across the lumen of the lower rectum. He had been on a fishing trip down to the Dead Lakes in Florida and had developed "an acute appendicitis." He was taken to the Moody Hospital in Dothan, Ala. His pain subsided, his blood count was not up and he had no fever. Dr. Moody kept him under observation for a few days and sent him home. Evidently the fishbone worked through the ileocecal valve and hung in the rectum, from whence I removed it.

Just the other day a little Negro boy came to the office with a history of two rather free hemorrhages from his bowels and his father was quite frightened. I followed Dr. Phillips' advice and inserted my finger into the anus to find the cause to be a mass of mayhaw seed impacted in the lower rectum. Enemas relieved the condition.

The country doctor sees many of these cases and if we would only take the time to examine them, go into just a little more detail, it would save us embarrassment, be of value to the proctologist and of great benefit to the patient.

I greatly enjoyed the papers of Dr. Phillips and Dr. Askew, and think they are quite timely.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

PHARMACISTS SEEK COOPERATION IN PLANNING MEDICAL CARE PROGRAM

An editorial in the *American Journal of Pharmacy* for February, 1944, states our opposition to state medicine is simply due to the fact that: "We do not have faith in government operation of anything as personal and vital as the relationship between a person and those in whom he places the responsibility for safeguarding his health and even his life. Such relationships should be as inviolable as our marital choice since they affect us just as profoundly and should be as carefully safeguarded.

"To stop here is, however, to court disaster. We in the professions related to public health cannot afford to sit complacently and parry the criticism of those who quite properly ask: 'Cannot some real improvement be made in raising the standards of health of the common man?' It is ridiculous for any well-informed person to take the position that medical care in its present state of organization is adequate for all income groups. This does not answer the question satisfactorily nor does it offer any effective barrier to the serious consideration of bills like that now before Congress. . . .

"Let no one believe that the private practice of medicine, pharmacy, dentistry or anything else is a divine right. It is, rather, a privilege granted by the society which it serves but only so long as it concerns itself primarily with the protection and assistance of society as a whole. What has been given can likewise be taken away."

The editorial specified two things that must be done if real progress is to be achieved. "First and foremost, there must be active cooperation between medicine, dentistry and pharmacy. Second, a plan of health insurance must be offered to the American people 'which still safeguards private enterprise, but accomplishes what millions of Americans now demand—a means of taking care of the various emergencies that arise throughout life due to sickness and injury.'

"With a finished plan the health professions, insurance and American industry can then say to the people: 'Here is a better

health insurance plan; it gives you what you have asked for and in addition it avoids regimentation and bureaucratic control. It is the real American way.' Then and then only can we properly and effectively oppose government-conceived plans, by ourselves offering something better. We must not overlook the fact that it is the function of government to protect its citizens in the absence of some other private agency which does so to the satisfaction of the majority concerned. There has never been a time in history when a strictly reactionary policy was successful. To avoid the pitfalls of government control we must take positive action."

Two reports of successful treatments with penicillin—one of three cases of brain infection and another of an abscess of the liver—are published in *The Journal of the American Medical Association* for March 4.

Captain Albert L. Evans, Medical Corps, Army of the United States, in reporting the treatment with penicillin of three cases of brain infection, points out that "Until the advent of the sulfonamides it was rare for persons with pneumococcic or staphylococcic meningitis [infection of the three membranes that envelop the brain and spinal cord] to survive. Reports of such survivals have appeared in the literature more frequently since these agents have been used, but penicillin seems to offer more hope for cure of these maladies than any other substance known at the present time. Two cases of staphylococcic meningitis and 1 case of pneumococcic meningitis are herewith reported as having been cured with penicillin at Lawson General Hospital. It is felt that survival would not have occurred with the types of therapy [treatment] in practice prior to the advent of penicillin."

Paul H. Noth, M.D., and John Winslow Hirschfeld, M.D., Detroit, report the successful treatment of an amebic abscess of the liver which had become secondarily infected, by means of the injection of penicillin into the abscess.

They say that "The results in this case have been encouraging. It is hoped that those who have similar cases will employ this method of treatment in order to determine whether it will be possible to avoid open drainage in secondarily infected amebic abscesses of the liver."

As Drs. Noth and Hirschfeld point out, open drainage of such abscesses carries with it a high fatality rate.

In a symposium, published in the same issue of *The Journal* under the auspices of the Association's Section on Experimental Medicine and Therapeutics, the need for a conservative attitude toward the possibilities of penicillin is emphasized by several authors.

Wallace E. Herrell, M.D., Rochester, Minn., concludes his report with the advice that "Penicillin should be reserved so far as possible for infections resistant to sulfonamide compounds. Penicillin therapy is no substitute for sound medical and surgical judgment in the treatment of bacterial infections."

THE PRESIDENT'S PAGE

IMPRESSIONS

Most impressions that I brought away from the recent meeting of the Medical Association of Georgia were superlative. Possibly the responsibility and ambition I feel in my new office made me more sensitive to the entire scope of activities than usual; possibly the strain of the two and a half years of war and the consequent absence of many of our men made the opportunity of coming together again more vital to us; whatever the reason, these impressions have lingered in my mind as no convention's sequences ever have before.

Savannah again the ideal convention city: gracious hospitality and friendliness, good food, women lovely and capable; beautiful social functions finished off by a banquet elegant in its appointments, with a program of delightful music by finished artists, and of clever impersonations — Savannah repeating herself in a bigger way than ever — that's my impression.

Scientific papers and discussions jam up-to-the-minute, material presented full of the trends of medicine, and discoveries developing faster than ever before in the history of medical science — many papers worth going farther than Savannah to hear — that's my impression.

A feeling of professional security in this day of changes when there is a new trend toward socialized medicine and new scientific attitudes, with a man of Lombard Kelly's caliber and his committee stemming the tide; a realization that the last one of us should stand four-square behind them; that we should contribute to the N. P. C. to the man; and then rest satisfied that organized medicine will be preserved — that is my impression.

Particularly am I impressed that a far-seeing eye is visualizing postwar problems that will arise in public health; that as emergencies appear with returning service men, foreign fevers and contagions, Thomas Abercrombie will have the answer — coveted security! Happy impression!

I am most impressed that the work of the House of Delegates was serious and eminently important, as well as the functioning of the Council and reports of the



several committees; that Edgar Shanks is amazingly efficient; and, above all, the devoted patriotism evidenced by every doctor present.

That the other half of the Medical Association of Georgia — the Woman's Auxiliary — is doing some long-range planning by enlarging their Student Loan Fund against that day when Uncle Sam can no longer give medical education to our boys; when medical ranks are thinned out by the war, and when quite likely economic conditions will make a medical education prohibitive for many. I am impressed that the Medical Association of Georgia should help substantially in enlarging this Foundation — a project peculiar to the Georgia Auxiliary. (I am impressed they are going to pass the hat).

I was further impressed by the splendid management of my predecessor, W. A. Selman; and I feel the tremendous challenge. I have come into office on the full-tide of his success — I might even get drowned.

But I find courage in the assurance of Ralph Chaney that he will "prop me up in all my leaning places." In fact, I was impressed that there will be many ready to help me in need. An old Negro said: "Unless a man is in need, his prayers ain't got suction!" I'm in such need that I am impressed that the suction will be there! I say to everyone of you, "Stand By."

CLEVELAND THOMPSON, M.D.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

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JUNE, 1944

**MEDICAL PROFESSION IS WORLD'S
GREATEST FRATERNITY**

The medical profession is the world's greatest fraternity, said Walter B. Cannon, M.D., president of the new American-Soviet Medical Society, in its first publication, *American Review of Soviet Medicine*. He added: "Wherever a doctor may go in civilized society, he is welcomed by his fellow doctors. International meetings, excursions of physicians to foreign lands, and wide-ranging cooperative study of disease by medical experts attest the universality of our professional interests and the community of our efforts. As disease itself is no respecter of national or racial differences, so the doctors in their humane service do not respect them. Even in bitter warfare among civilized peoples, wounded enemy captives receive scrupulous surgical care. Though methods of treating injury and disease may differ in different lands, the aim is everywhere the same — the mitigation of human suffering, the saving of human life. On that humane purpose is firmly based the vast brotherhood of the doctors of medicine.

"In medical research, likewise, no artificial barriers between nations are recognized. The world-wide uniformities of the phenomenon of infections, malnutrition, traumatisms, and healing render such barriers absurd. Investigators of these phenomena in various countries publish openly their methods of research and their results. Thus all may profit by the unrestricted exchange of ideas. Perforce, therefore, in the advancement of medical knowledge there is international collaboration.

"Outstanding characteristics of our profession in recent times have been an awareness that medical knowledge is in process of evolution, an assurance that investigators can be expected to continue to reveal new

insight into the nature of bodily disorders and into more and more effective ways of avoiding or curing them, and a readiness to utilize progressive measures in practical application. While procedures which have been proved good by past experience are respected, new procedures resulting from scientific discoveries are considerably tested for their greater or their novel utility. In short, the medical profession is not tightly bound in tradition, but is free and forward-looking. Steps of impressive advance have compelled the profession to abandon notions of rigidly fixed patterns of practice, and instead to expect the disclosure of better ways of solving the urgent problems presented by mankind, disabled, in misery, and faced with premature death. Solutions of these problems may be found in any nation. Because they are urgent and insistent problems, incidental barriers of prejudice or of exclusive nationalism represent folly instead of wisdom.

"Unfortunately there is a difficult natural barrier which, despite the freedom of exchange of medical knowledge, despite the generous fraternity of the medical profession, despite the readiness of the profession to accept and use effective new discoveries, may block the ways which could lead to mutual advantages. This barrier, a marked difference of language, exists between the Soviet Union and the United States. Though many leaders of Soviet medicine can read English medical literature, relatively few English-speaking physicians are familiar with the Russian language. Consequently Soviet medical publications have little circulation in the English-speaking nations, and little is known of progress in the theory and practice of medicine and surgery in the Soviet Union. As a remedy for this defect, the *American Review of Soviet Medicine* is being issued. It will contain translations of important papers from the Russian, survey articles written by American experts on various aspects of Soviet medicine, news of current medical events in the U.S.S.R., reviews of Soviet medical books, and abstracts from Soviet medical periodicals. At a time when the Soviet Union is enduring magnificently

and most valiantly the exacting strain of total war, and when Soviet surgeons, meeting the exigencies of mobile combat, are confronted with unique situations, the *Review* will present a section on war medicine.

"Publication of the *Review* is only one of the purposes of the American-Soviet Medical Society. The society plans to send books and periodicals to the Soviet Union and, when conditions permit, it plans to establish an exchange of students and teachers between the Soviet Union and the United States. Hope is entertained that reciprocal undertakings will serve to strengthen in time the natural ties of fellowship of physicians in the two countries and thereby will help to promote mutual acquaintance and to lessen ignorance and misjudgment among the citizens of two great and powerful nations."

RECORDS STREAMLINED

As a step to relieve the burden imposed by war conditions on the medical profession, the adoption of two new short simplified statement forms to be filled out by physicians for their patients who have accident or sickness claims under personal accident or health policies is being recommended by The International Claim Association and the Health and Accident Underwriters Conference to companies writing these forms of insurance.

Introduction of the new forms, the association believes, will be an advantage not only from the physicians' standpoint but also in enabling policyholders to establish their claims more promptly.

"The standardization and simplification of forms is especially important at this time when every doctor remaining on the home-front is called upon to serve a vastly increased number of patients and has the added handicap of a shortage of clerical help," said J. Doyle DeWitt, president of The International Claim Association. "With the companies using a standard form and the amount of information requested held to a minimum, the doctor can fill out the blanks much more easily and the policyholders who are his patients can more promptly establish their claims."

The new physicians' statement blanks have been drafted jointly by the Medical Conference Committee of the Claim Association headed by A. G. Frankhauser of Chicago and a special committee of the Underwriters Conference headed by George W. Young of Des Moines. These committees have had the interested cooperation of Dr. R. G. Leland, Director of the Bureau of

Medical Economics of the American Medical Association and also of the Governing Committee of the Bureau of Personal Accident and Health Underwriters.

The questions on the simplified blanks are designed to bring out the facts necessary to establish the claim. All other questions have been eliminated. No notarial acknowledgment or other verification by the doctor is required.

WHAT APPEARS TO BE A CURE FOR VARICOSE (OR LEG) ULCER

A Wet Dressing of Milk of Magnesia

I use a pledget of absorbent cotton large enough to cover the ulcer, following this method: pour milk of magnesia into a small sterile vessel, thoroughly saturate one side of the cotton, place the wet side next to the sore, cover with a dry pledget of cotton, and bandage to keep in place. If the ulcer is giving pain, drop a few drops of tincture of opium over the magnesia on the dressing. I dress the ulcer once a day. I do not curette nor use any antiseptic cleanser along with the magnesia treatment.

Since I have not had occasion to treat a sufficient number of cases of varicose ulcer to establish scientific proof of the results of the milk of magnesia treatment, I wish that other doctors would try this remedy and report through this JOURNAL.

At present I have a patient who came to me with an unusually large and deep ulcer on his leg. He is a man of outdoor work, who has found it necessary to continue with his various chores, such as milking, tending stock, cutting firewood, trimming hedges and gardening, during the time which he has been under treatment. He has left off his work only long enough to get the ulcer treated once a day. Several times he has bruised the ulcer or let the bandage become soaked with dew, but despite all this it is healing steadily and becoming less painful as a result of the milk of magnesia treatment.

L. R. BRYSON, M.D.
Jefferson, Ga.

Post-War TB Control by Howard W. Blakeslee, Science Editor, Associated Press. The well-known science editor, Howard W. Blakeslee, discusses present wartime activity in fighting tuberculosis from the standpoint that "the foundation for ending tuberculosis is now being laid and the outlook for success is good." He points out that certain major records—the chest x-raying of men entering the armed forces and the extension of the chest x-ray service for war workers—is bringing tuberculosis to light as never before and says that such momentum promises success for the post-war control of this disease.

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babbin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone WALnut 8911; residence, VERNon 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone WALnut 8911; residence, JACKson 7979.

RED CROSS NURSING SERVICE OF THE GEORGIA STATE NURSES' ASSOCIATION

MRS. OLIVE L. BARBIN, R.N.
Chairman Red Cross Committee
Georgia State Nurses' Association

One of the very necessary demands of this fast moving, streamlined, mobile war is adequate and efficient nursing service for both military forces and civilians. In supplying this need the American Red Cross and the American Nurses' Association are sharing responsibility in a program administered by nurses whose time is given gratuitously as a contribution to the war effort, and for the advancement of their professional organizations.

To facilitate this work and to insure service in even remote areas, the plan of operation is through special committees set up in national, state and district nurses' associations, each following the same pattern.

The Georgia State Nurses' Association promotes Red Cross nursing activities through a special committee composed of representatives from each branch of nursing which works in cooperation with the five local recruitment committees set up under Red Cross chapters over the State. These chapter nurse recruitment committees, on which lay persons as well as nurses serve, are responsible for the procurement of nurses for the armed forces, and preparation of their applications for military service while the special committee of the Georgia State Nurses' Association has other functions as well. Among the most important are the following:

1. To interpret Red Cross nursing service activities to the State Nurses' Association, keeping them up-to-date on changes in policy as outlined by the national organizations.

2. To promote Red Cross nursing service activities by encouraging qualified nurses to teach Red Cross Home Nursing and Volunteer Nurses' Aide Courses; by encouraging hospitals to train and use Volunteer Nurses' Aides; and by supporting the Student Reserve program which is enrollment of third year nursing students in the Red Cross Reserve that they may be ready immediately upon graduation for military assign-

ment.

3. To interpret nursing needs of the State and the State's responsibility to meet its quota for the military services.

4. To keep the Red Cross area office informed of problems, and to work with the area representative on them.

The American Red Cross Area Office, serving not only Georgia but the southeastern portion of the United States, is located at 230 Spring Street, N.W., Atlanta, while headquarters of the Red Cross Committee of the Georgia State Nurses' Association is 131 Forrest Avenue, N.E., Atlanta.

Georgia has made a fine record in not only meeting but exceeding its quota of nurses for the military services, but military needs change rapidly and consequently quotas cannot be stationary for long. Eighteen hundred nurses by July 1, 1944, are needed for the Navy alone, while replacements as well as new assignments are constantly needed by both the Army and Navy. It is the consensus of opinion that the total number of nurses needed for military assignment during 1944 will be more than the total of all graduates from all training schools. For this reason it is necessary that a large reserve of Red Cross nurses be maintained by constant enrollment in the War and First Reserves, the groups made up of nurses eligible for active military duty. That group of Red Cross nurses known as the Second Reserve, not eligible for military service because of age or physical disability but wishing to serve locally in various Red Cross programs, now numbers about 60,000 and is at present ample for home front needs. The Red Cross is grateful for the valuable contribution of this group in teaching classes in Home Nursing and Volunteer Nurses' Aides, for their service in disasters, their work on recruitment committees and in many other ways. For the present, there will be no more direct enrollment into the Second Reserve but efforts will be concentrated on nurses who are immediate military prospects.

Everyone concedes the importance of nursing our fighting forces back to health and surely we must agree with a great Chinese physician who has said: "It is not worthwhile to save our country as a nation if we cannot maintain the health of our people."

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

LET'S LOOK AT OUR PROBLEM

The mortality figures for Georgia recently released focus our eyes on the so-called degenerative diseases. Heart disease heads the list, followed closely by nephritis and cerebral hemorrhage and other cerebral accidents, all of which are related to one another through arteriosclerosis. A further study of the deaths from these causes shows that these conditions are claiming the lives of an increasing number of our citizens who are too young to die from such causes.

Why should these people die at an early age when their lives could have been prolonged? The answer is that they lack proper medical care, not because they could not afford it but because they did not seek medical attention when they were apparently well. The State of Georgia needs an educational program to show our people the value of routine medical examinations. The family physician must play the most important part in the program. He must encourage routine physical examinations, then take a careful history and make a thorough examination including such x-ray and laboratory examinations as may be indicated. This is an obligation he owes to his patient.

DEATHS AND DEATH RATES PER 100,000 POPULATION FROM ALL CAUSES AND THE TEN LEADING CAUSES OF DEATH FOR THE STATE OF GEORGIA FOR 1943

<i>Cause</i>	<i>Number</i>	<i>Rate</i>
All Causes	29,007	928.6
1. Heart Disease	5,672	181.6
2. Nephritis	3,093	99.0
3. Cerebral Accidents	2,901	92.9
4. Cancer	2,076	66.5
5. Pneumonia	1,703	54.5
6. Accidents other than auto	1,293	41.4
7. Tuberculosis	1,285	41.1
8. Influenza	607	19.4
9. Auto accidents	595	19.0
10. Homicides	434	13.9

Many people have some vague complaint and visit their physician who may take their temperature, look at their tongue, pat them on their back and tell them, "There's nothing wrong with you except you are worrying too much — you'll be O. K. — just forget about it." The patient can't help but be discouraged after such an incident. Has the physician done his part? No, he has not. In fact, he has failed in his job and even though there was nothing wrong with the patient, he has been discouraged from seeking medical advice for vague complaints. At the time of that visit or at a later date, those vague symptoms may be cancer, hypertension, diabetes, tuberculosis, syphilis, heart disease or numerous other condi-

tions to which the body falls heir. A careful history and thorough physical examination plus necessary laboratory examinations may discover many of these conditions in their early curable stages.

If the citizens of Georgia sought and got thorough physical examinations at regular intervals, many useful years of life could be lived by many who are dying before their time. We need to inform the people of the value of proper medical care. Compare the value of your services in regulating lives to prevent hypertension, arteriosclerosis, heart disease, nephritis, cerebral hemorrhage, uremia, paresis, diabetic coma and incurable cancer with your services in treating these conditions after they have developed. It is much better and more profitable to prevent them than it is to treat or cure most of these conditions. The private physician must be the builder of faith in his patient in the prevention of illness because it is his word that is accepted as final in matters pertaining to health.

You might say that with the physician shortage, "I don't have time," but now is a good time to take time and do justice to your patient and to yourself. Any time spent in preventing a death or a cripple is well worth while. If your patients are prevented from becoming sick, they can come to you and you can see more of them than when you must spend half your time going to see them.

It is my hope that the physicians of Georgia will use the valuable information compiled by the Georgia Department of Public Health in studying our problems and offering a solution. These data are yours for the asking, so if you are interested in a certain condition and want the facts about the cases and deaths that have occurred in the past in Georgia, you can get such information from your State Health Department.

We face changing times and what the future will bring no one knows. It will, however, result in an enlightened public seeking health and advice of how to obtain and maintain good health. With the swing to prevention, early diagnosis and treatment, the future of medicine is bright and America will still enjoy the best medical care in the world under the private practitioner.

DAVID M. WOLFE, M.D.

Georgia Department of Public Health.

THE PUBLIC HEALTH PHYSICIAN

Fifteen years ago a leading public health physician said that there were three types of physicians that took up public health work: first, the young graduate who wished a salaried position for a year or two so he could accumulate sufficient funds to equip an office and maintain himself until he could establish a practice; second, the older physician who had tired of the

exacting duties of private practice; and, third, the physician with a truly missionary spirit and altruistic nature which prompted him to adopt a life work that would afford an opportunity for the greatest possible service to the largest number of people.

It is not necessary to say that the first two classes rendered very indifferent service, and did very little or nothing to improve health conditions, to prevent disease, or to increase the span of life. Nor did they render services or produce results that would so popularize public health as to influence other physicians in considering public health as a career.

Fortunately, there were a few of the third class. Their number was pitifully small, but their vision of the future benefits to humanity, their dreams of the possibilities of such services by trained public health specialists, and their enthusiasm for pioneering have brought public health to its present status of public approval and efficiency. To these few will go the credit for the public health of the future.

The picture is very different today. Young men who have had the best of training in general medicine and one or more years of hospital experience are choosing the field of public health as a career, and finding for themselves a place where they can render real service to humanity and at the same time make a real contribution to medical knowledge. As proof that great progress has been made in public health during the past quarter of a century, there are now recognized no less than twenty-two specialties in the various phases of public health: medical, nursing, engineering and so on. Ten of these phases are or may be of especial interest to physicians. These are administration, epidemiology, tuberculosis control, venereal disease control, industrial hygiene, maternal health, child hygiene, nutrition, biostatistics, and laboratory direction.

To Georgia and some of her citizens belong the credit and honor of being the first to give legal recognition to public health as a distinct medical specialty. Thirty years ago, when the health laws of the State were revised, it was required that before entering public health physicians should acquire special knowledge and successfully pass an examination in hygiene and sanitation and the State health laws. Within the last few years, and by enacting a law creating a merit system of personnel administration, all persons in the field of public health are required to have special qualifications for the particular work to be done. These standards for public health are now recognized throughout the land, not only by the public health workers themselves but by the medical profession and the public generally.

The undergraduate medical schools, as a group, have lagged in this respect. It has been only in the last few years that courses in public

health have been offered by more than two or three schools, and these courses left much to be desired. Here again Georgia was among the pioneers. Now both of our schools of medicine include public health in their curricula, and there are strong indications that these will be improved in the near future. Several of the larger universities are now offering graduate courses that give degrees in public health.

The medical history of Georgia shows that from the beginning the leaders in the medical profession have supported a public health program. It is acknowledged that an effective public health program can best be administered on the local level. Each county should have the benefit of a health department, either as a county unit, or a district composed of two or more counties. About ten years ago the Advisory Committee to the State Board of Health recommended certain policies for the operation of the department, and these policies were adopted by the Medical Association of Georgia. The following was written into these policies by the committee: "Since experience has shown that public health work has succeeded in direct proportion to the support and cooperation of the local medical profession, it shall be the policy of the Department of Public Health of Georgia to use all reasonable means of securing the sympathetic understanding and active help of the profession in the application of the above outlined policies. Study reveals that more than fifty per cent of the population of Georgia is without adequate public health supervision. It is desirable, therefore, that the profession lend its active support to such remedial measures as may be proposed to correct this major defect in our public health system."¹

This program has had the sympathetic and active support of the medical profession in nearly every county in the State. Under the leadership and advice of the physicians of a large majority of the counties in Georgia, the general population and finally the county officials have been educated to the value of public health work. Many county boards of health have provided for and established the service, and yet others are anxious to do so if qualified workers were available. Established health departments have been enlarged to the extent of available personnel.

A splendid evidence that the value of public health work is more fully appreciated now than formerly is that more suitable quarters are being furnished for the health departments in many counties. Only a few years ago most health departments had offices in the courthouse basement or attic, or in some rented rooms over a store. In the last two or three years more than twenty counties have either bought existing buildings and remodeled them to suit the needs of the

WOMAN'S AUXILIARY : OFFICERS 1944-45

President—Mrs. W. T. Randolph, Winder.

President-Elect—Mrs. Lucius N. Todd, R. F. D. No. 2, Augusta.

First Vice-President—Mrs. Edgar H. Greene, 1442 Wesley Road, Atlanta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Leonard Massengale, Lumpkin.

Recording Secretary—Mrs. Charles Usher, 6 East Liberty St., Savannah.

Corresponding Secretary—Mrs. Alex Russell, Winder.

Treasurer—Mrs. Ralph Fowler, Marietta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. Charles Daniel, College Park.

STATE CONVENTION

NEW OFFICERS

Mrs. W. T. Randolph, of Winder, was installed as president and Mrs. Lucius N. Todd, of Augusta, was named president-elect at the closing session of the recent state convention of the Woman's Auxiliary to the Medical Association of Georgia, held in Savannah. Other officers installed include Mrs. Edgar H. Greene, of Atlanta, first vice-president; Mrs. L. W. Williams, of Savannah, second vice-president; Mrs. Leonard R. Massengale, of Lumpkin, third vice-president; Mrs. Charles Usher, of Savannah, recording secretary; Mrs. Alex Russell, of Winder, corresponding secretary; Mrs. Ralph Fowler, of Marietta, treasurer; Mrs. W. W. Puett, of Norcross, historian; and Mrs. Lee Howard, of Savannah, parliamentarian.

Mrs. Cofer presented the Auxiliary a handsome silver bowl, to be known as the Achievement Award and to be given to the county auxiliary having the outstanding achievement. The trophy was won by the Woman's Auxiliary to the Fulton County Medical Society, of which Mrs. J. Harry Rogers is president. The Brawner Cup, which is awarded annually to the auxiliary which best fulfills a certain requirement, went to Ware County, Mrs. W. M. Flanagan president. The Baldwin County Auxiliary won the White scrapbook award. Mrs. Sam A. Anderson is president of this auxiliary. The winner of the White exhibits award was the Richmond County Auxiliary, of which Mrs. Robert E. Leonard is president.

MRS. ROGERS RESIGNS

At this time I regretfully announce that I have resigned as chairman of press and publicity after serving the Auxiliary in this capacity for the past nine years. Nothing but the fact that my husband is now on sea duty with the Navy Medical Corps and my future plans are very uncertain would have made me give up the work, for the publicity of the Auxiliary is very dear to me. But I live with a packed bag and a listening ear for that message "the ship's in" and I feel that I never know from one week to another where I may be, for as long as I can, I'll always be meeting the ship. The work has been very happy for me for I have received such

splendid cooperation from all of the auxiliaries, and for that I am grateful. The editor of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA has given me wonderful cooperation at all times and so I say thank you, Dr. Shanks, as I say goodbye. Mrs. Charles Daniel, College Park, Ga., will carry on the press and publicity work. Items should be sent to her by the 15th of the month preceding publication.

THE PUBLIC HEALTH PHYSICIAN

(Continued from page 196)

health department, or erected new and modern buildings. Modern equipment is being secured so far as war-time conditions will permit. Many other counties will follow this example as soon as building materials become available. This is tangible evidence of the growing appreciation of the value of public health work.

Action on the part of local governments will make the goal of health services for every county, as expressed by the Medical Association of Georgia in the quotation above, more easily reached. The main obstacle in reaching this goal has been the inability to secure a sufficient number of physicians possessing the necessary qualifications. To meet the minimum requirements of a fairly adequate program, there are needed not less than thirty more physicians than are now available. It is expected that many physicians now with the armed forces, who have seen at first hand a program of public health and preventive medicine, and who return to find the added inducements civilian public health has to offer, will accept the challenge a career in public health presents.

GUY G. LUNSFORD, M.D.

REFERENCE

1. Lunsford, Guy G: A Cooperative Health Program, J. M. A. Georgia 25: 302-303 (Aug.) 1936.

Decatur-Seminole Medical Society

The Decatur-Seminole Medical Society announces the following officers for 1944:

President—W. L. Wilkinson, Bainbridge

Vice-President—W. E. Whittle, Iron City

Secretary-Treasurer—M. A. Ehrlich, Bainbridge

Delegate—R. F. Wheat, Bainbridge

Alternate Delegate—L. W. Willis, Bainbridge

NEWS ITEMS

Dr. J. D. Applewhite, Macon, Macon-Bibb County Health Officer, tendered his resignation effective July 15.

Dr. Robert B. Greenblatt, formerly of Augusta and Savannah, and chairman of the Southeastern Medical Center at Savannah, has been transferred to Denver, Colorado, and associated with the U. S. Public Health Service for the duration.

Dr. J. R. Rinker, member of the faculty of the Department of Urology at the University of Georgia School of Medicine, spoke before a meeting of the Optimist Club at the Richmond Hotel, Augusta, May 17, on "Milestones of Urology."

Col. Philip L. Cook, former post surgeon at Camp Gordon, has been appointed commanding officer at the Provisional Convalescent Camp for Ambulatory Patients at Daytona Beach, Florida.

Dr. H. B. Bray, Wrightsville, has moved to the Clinic Building, and will equip his offices with facilities to take care of a large class of people in need of such a medical outfit.

Dr. B. V. Elmore, Rome, Floyd County Commissioner of Health, with the help of a nurse from the Floyd County Health Department, conducted a pre-school clinic in the Fourth Ward School, May 9.

Dr. Marion C. Pruitt, Atlanta, spoke before a meeting of the Bibb County Medical Society, Baconsfield Club, Macon, June 6.

Dr. Leon E. Bawner has recovered from a recent illness and has resumed practice in Suite 803 Medical Arts Building, Atlanta. His practice is limited to diseases of the eye, ear, nose, and throat.

OBITUARY

Dr. Thomas Franklin Petway, Atlanta; member; Atlanta School of Medicine, Atlanta, 1906; aged 66; died May 22, 1944, in a private hospital. He was a native of North Carolina. Dr. Petway had practiced medicine in Atlanta for 25 years. He was a member of the Fulton County Medical Society, F. & A. M. and First Baptist Church. Surviving him are his widow, two daughters, Dr. Virginia McNamara, San Francisco, and Mrs. C. L. Gregory, Atlanta; three sons, T. F. Petway, Jr., Jacksonville, Florida; Lt. Wm. E. Petway, with the Army in the South Pacific; and private Allen P. Petway, Augusta; a brother, A. P. Petway, Waco, Texas. Funeral services were conducted by Rev. C. C. Buckalew, at Pope's Church. Interment was in Pope's Church Cemetery.

Dr. John Banks, Hamilton; member; Atlanta School of Medicine, Atlanta, 1911; aged 66; died May 16, 1944. He was a native of LaGrange. He was a well known physician in LaGrange and the surrounding section. Since he made his home in Hamilton for several years, he continued his practice in LaGrange and Hamilton. He was a member of the First Baptist Church. Surviving him are his widow and one sister,

Mrs. L. D. Mitchell, LaGrange. Rev. Montague Cook officiated at the funeral services conducted at the Hunter-Owen Chapel. Burial was in Hillview Cemetery.

Dr. Marsden Treutlen Cleckley, Augusta; Hahnemann Medical College and Hospital of Philadelphia, Pa., 1895; aged 73; died May 8, 1944. He was a native of Augusta and a successful practitioner. Dr. Cleckley was a member of the Knights of Pythias and St. John's Methodist Church. Several cousins survive him. Rev. Paul A. Turner officiated at the funeral services conducted at St. John's Methodist Church. Burial was in Magnolia Cemetery.

Dr. William Simpson Elkin, Atlanta; member; University of Pennsylvania School of Medicine, Philadelphia, Pa., 1882, aged 86; died April 24, 1944, in an Atlanta hospital after a long illness. He was born in Lancaster, Ky. He received his literary education at Lancaster High School and in Center College, Danville, Ky. After he received his degree in medicine, he immediately came to Atlanta and took a prominent part in the medical affairs of the city. Dr. Elkin was demonstrator of anatomy, then professor of clinical surgery at the Southern Medical College. He became co-founder and president of the Atlanta Academy of Medicine. In 1886 he was lecturer on venereal diseases in the Southern Medical College. In 1913 he became dean of the Atlanta Medical College which was the name of the consolidated schools of the Atlanta College of Physicians and Surgeons and the Atlanta School of Medicine. Through the efforts of Dr. Elkin in cooperation with Bishop Warren A. Candler and Asa G. Candler, Sr., the Atlanta Medical College became the Medical Department of Emory University in June, 1915. Dr. Elkin was retained as dean and professor of obstetrics and gynecology. In 1925 after he resigned the position as dean, he was elected dean emeritus and emeritus professor of obstetrics and gynecology; later in the same year he received the degree of LL.D. from the University. Center College conferred the same degree upon him in 1929. Emory University School of Medicine received a grant of \$25,000 from the Carnegie Foundation mainly through the efforts of Dr. Elkin. After he limited his practice in 1925, he was continuously available for free advice. He was consulting surgeon at Grady Memorial Hospital and gynecologist at Emory University Hospital. He served during World War I on the draft boards in wards eight and nine; trustee of Carnegie Library and the Milledgeville State Hospital. As a leader and in cooperation with a few others he organized the Atlanta Society of Medicine which is now known as the Fulton County Medical Society and served two terms as president. He was a member of the Southeastern Surgical Congress, American Medical Association, American College of Surgeons and the First Presbyterian Church. Surviving him are his widow, and one nephew, Lt. Col. Dan C. Elkin, M. C., U. S. Army, chief of surgical service at Ashford General Hospital, White Sulphur Springs, W. Va. Dr. Wm. V. Gardner officiated at the funeral services conducted at Spring Hill Chapel. Pall-

bearers were: Dr. Calhoun McDougall, Dr. F. M. Atkins, Dr. Charles S. Ward, Jr., Dr. Ben H. Clifton, Dr. Howard Hailey, Dr. Glenville Giddings, Dr. William C. Warren and Dr. Russell H. Oppenheimer. As an honorary escort were: members of the Fulton County Medical Society, faculty of Emory University School of Medicine, elders and deacons of the First Presbyterian Church. Burial was in Stanford (Kentucky) Cemetery.

Dr. Carey A. Barron, Kingsland; Atlanta School of Medicine, Atlanta, 1912; aged 57; died April 24, 1944, suddenly of heart disease while driving his car home after making a call to see a patient. He made an excellent reputation as a general practitioner and diagnostician. Surviving him are his widow, two sons, Carey Barron, Jr., and one son serving in the U. S. Navy; three daughters, and many other relatives. Rev. Bird Yarbrough and pastor of the Baptist Church officiated at the funeral services. Interment was in Oak Grove Cemetery.

Dr. Louis Smith, Lakeland; member; University of Georgia School of Medicine, Augusta, 1906; aged 67; died April 28, 1944. He was a native of Clinch County. Dr. Smith spent his life in the community where he was born and reared. He was steward in the Methodist Church. Rev. L. D. McConnell and Rev. John W. Harrell officiated at the funeral services. Surviving him are his widow, one daughter, Miss Leila Hutcheson; and one sister, Mrs. Lillian Tomlinson; one brother, Mose Smith, Willachoochee.

PENICILLIN

Supplies of Penicillin are increasing. Up to this time only a limited quantity has been available for emergency civilian use on allocation by the War Production Board through Dr. Chester S. Keefer and his committee operating under the National Research Council. Now, because of rapidly expanding production, supplies are sufficient to permit release of a greater amount for use by civilians. However, the supply is still not adequate, and allocation is to be continued by the War Production Board aided by an advisory panel representing the National Research Council, U. S. Public Health Service, and the American Medical Association.

The War Production Board has prepared a list of hospitals to which the initial distribution of Penicillin will be made. In addition to supplying their own requirements, these institutions are to act as depots for hospitals in the vicinity which are not on the initial list. Each depot hospital will have a monthly quota, which may be purchased through the Office of Civilian Penicillin Distribution, War Production Board, 226 West Jackson Boulevard, Chicago 6, Illinois. From that office orders will be passed on to Penicillin manufacturers according to the supply available and the producer will ship Penicillin to the hospital through the regular channels. Penicillin manufacturers cannot accept orders except as they come through Dr. Keefer or the Office of Civilian Penicillin Distribution.

Eli Lilly and Company has been actively engaged in Penicillin work since the first announcement of its discovery in England and is doing everything possible to increase Penicillin production to the point where restrictions can be removed.

SUMMER DIARRHEA IN BABIES

Casec (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 8 level tablespoonfuls of Casec. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Malbec arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casec gradually eliminated. Three to six teaspoonfuls of a thin paste of Casec and water, given before each nursing, is well indicated for loose stools in breast-fed babies.

Please send for samples to Mead Johnson & Company, Evansville, Indiana.

REPORT ON FILM EQUIPMENT SURVEY

Film planning can be done much more effectively when agencies which make films have at least a broad picture of the type of film-showing equipment available among the groups they wish to reach. The value of such information has been demonstrated by the recent Department of Commerce studies of visual aid equipment on hand in elementary and high schools. Figures on equipment available in another group—this time community agencies—are now released as the result of a survey made by the Metropolitan Life Insurance Company.

The Motion Picture Bureau of the company's welfare division, under the direction of Dr. Donald B. Armstrong, sent a questionnaire to social, health, and safety agencies all over the country to find out how many agencies had access to or owned equipment for showing films. These agencies were also asked to indicate what type of equipment they had—sound or silent, 35 mm. or 16 mm. film strip or glass slide projectors. The organizations surveyed cover a wide range, including among others urban and rural health departments, various nursing organizations, family welfare associations, boys' clubs, schools of medicine, nursing, and social work, safety councils, and tuberculosis associations.

Replies came from more than half of the 5,000 organizations that received the questionnaire. More agencies report having 16 mm. projectors, both sound and silent, than any other equipment. Schools of medicine and nursing own most of the glass slide projectors. As might be expected, boys' clubs favored sound equipment two to one.

An analysis of the returns shows other facts which may be of interest to social and health agencies. Full details of the results of this survey may be had for the asking by any official or voluntary social, health, or safety agency that may find them useful. The Metropolitan Motion Picture Bureau will furnish information

regarding the entire survey, or as broken down by localities or types of organizations in accordance with the request.

In addition to this information, the Motion Picture Bureau has a library of catalogs of motion pictures and film strips available through universities, museums, safety councils, federal and State government departments, industries, etc., covering many subjects to agencies requesting them. For any information on this survey of film equipment, the company's own films, or films available through other sources, write to:

Dr. D. B. ARMSTRONG, *Third Vice-President*
Welfare Division
Metropolitan Life Insurance Company
1 Madison Avenue
New York 10, N. Y.

PREScription WRITING

One of the most difficult problems in the teaching of medical students is that of prescription writing said Harvey B. Haag, of the Department of Pharmacology of the Medical College of Virginia. He added: "Perhaps no single fact of medical instruction is so frequently the butt of adverse criticism, not only from physicians themselves but from those responsible for compounding prescriptions, namely pharmacists. Those who teach pharmacology to medical students are well aware of this situation, and many have been the methods used in attempting a solution. In this connection it may be of interest to outline briefly a plan which is being tried at the Medical College of Virginia.

"A prescription is a message from a physician to a pharmacist, and so the better these two understand one another the more smoothly will this message be interpreted and executed. With this in mind the school of pharmacy here at the college was asked some several years ago to aid in the teaching of prescription writing to our medical students. This cooperation was gladly given. At present, during the regular pharmacology course, eight lectures are given by Dr. T. D. Rowe and Dr. Karl Kaufman, in which the more common pitfalls and errors of prescription writing, as the pharmacist sees them, are brought to the attention of the medical students. In addition, other problems of mutual concern, such as, for instance, the intricacies of the narcotic laws, are discussed. While this program has now been in progress too short a time for final evaluation, it is already evident that this addition to the teaching of medical pharmacology is bearing fruit and it is planned to continue this cooperative scheme on a more elaborate scale in the coming years. Fundamentally this would seem to be a sensible and logical procedure and for us here at the college, because of our unique organization, an especially feasible plan."

HOW TO LIVE LONGER

Most civilian physicians are working too hard for comfort, in many instances literally "rushed to death." After all, the average age of doctors on the home front must be well up in the fifties.

They would be serving their country and their families better—and longer—by taking a little time out to follow an artistic hobby such as sketching, photographing, water coloring, painting, even whittling.

Art may be easier to take than exercise, yet affords you respite from strain and worry, at the same time offering limitless opportunities for self-expression and the joy of achievement!

Now is a good time to get ready to exhibit your artistic handicraft at the annual exhibition of the American Physicians' Art Association which will be held with the A. M. A. Session, June 12-16, 1944, in the gallery of the beautiful Grand Ballroom, Stevens Hotel, Chicago.

You can get full particulars by writing to the Secretary, Dr. F. H. Redewill, Flood Bldg., San Francisco, Calif.

Regardless of how long you've "dabbled in art," you can win a prize—and lighten the war's burden on your heart and arteries.

COUNTIES REPORTING FOR 1944

Emanuel County Medical Society

The Emanuel County Medical Society announces the following officers for 1944:

President—J. H. Chandler, Swainsboro
Vice-President—S. S. Youmans, Swainsboro
Secretary-Treasurer—D. D. Smith, Swainsboro
Delegate—J. H. Chandler, Swainsboro
Alternate Delegate—S. S. Youmans, Swainsboro

Bulloch-Candler-Evans Counties Medical Society

The Bulloch-Candler-Evans Counties Medical Society announces the following officers for 1944:

President—R. L. Kennedy, Metter
Vice-President—W. E. Floyd, Statesboro
Secretary-Treasurer—W. E. Simmons, Metter
Delegate—A. J. Mooney, Statesboro
Alternate Delegate—C. E. Stapleton, Statesboro

Henry County Medical Society

The Henry County Medical Society announces the following officers for 1944:

President—A. W. Carter, McDonough
Vice-President—H. C. Ellis, McDonough
Secretary-Treasurer—E. G. Colvin, Locust Grove
Delegate—R. V. Brandon, McDonough

Morgan County Medical Society

The Morgan County Medical Society announces the following officers for 1944:

President—W. M. Fambrough, Bostwick
Secretary-Treasurer—W. C. McGeary, Madison
Delegate—J. L. Porter, Rutledge
Alternate Delegate—W. C. McGeary, Madison

Newton County Medical Society

The Newton County Medical Society announces the following officers for 1944:

President—J. R. Sams, Covington
Secretary-Treasurer—W. D. Travis, Covington
Delegate—S. L. Waites, Covington
Alternate Delegate—W. D. Travis, Covington

Jefferson County Medical Society

The Jefferson County Medical Society announces the following officers for 1944:

President—S. T. R. Revell, Louisville
Vice-President—V. L. Bryant, Bartow
Secretary-Treasurer—John R. Lewis, Louisville
Delegte—J. J. Pilcher, Wrens

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HYPERTENSION

The Examination of Patients

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Atlanta

A review of the literature on hypertension gives us the impression that patients with high blood pressure readings may be grouped as follows: first, those with arteriosclerosis whose blood pressure readings increased to a point above normal and who have relatively low diastolic pressure readings; second, patients in whom a cause for their hypertension can be demonstrated; and, third, all patients not included in the above categories, their condition being referred to as "essential hypertension."

Little is known about the cause of arteriosclerosis, and in the case of the first class of patients referred to above, we must assume that this condition represents a more or less natural process of aging, increasing year-by-year as it seems to do in most of us. We do not know when this "natural" process is supposed to begin, nor how fast it should "normally" progress. No satisfactory explanation has been given for the fact that some patients have it at an early age, some in middle life and that some elderly people show practically no signs of it. We do not know why some patients with arteriosclerosis have a very high blood pressure and some have hypotension. The explanations that arteriosclerotic patients with hypotension have no involvement of their renal vessels does not seem logical, because some of these patients have such a marked general involvement of their ar-

teries that no part of the body could possibly be free of this condition. Also, if the arteries of the kidneys be involved in the arteriosclerotic patients with hypertension, there should be less difference than apparently exists between these patients and those with essential hypertension.

In the second classification are included many types of hypertension, the causes of which are accepted as evident, such as tumors of the pituitary and certain other intracranial tumors, tumors of the adrenals, retroperitoneal glomerulonephritis, severe amyloidosis of the kidneys, periarteritis nodosa of the renal vessels, toxemia of pregnancy, obesity,¹ diabetes, congenital coarctation of the aorta, arteriovenous fistula, endocrine imbalances, and large uterine fibroids.²

Included also in this classification are cases of hypertension caused by such conditions as polycystic kidneys, intrarenal pelves,³ Wilm's tumor,⁴ hematoma in a kidney from an injury, congenital hypoplasia of one or both kidneys, embolism of a renal artery, urinary obstruction from any cause, pyelonephritis, and contracted kidney following infection, injury, or operation.

It is plain that most of these last mentioned conditions may not be found without an extensive examination. It is also true that these conditions produce hypertension by the same mechanism as that active in producing hypertension in experimental animals; that is, by interference with the blood flow in the kidneys. Because of this, cases of hypertension belonging to this last group will be called essential hypertension until their cause is demonstrated.

Everyone still agrees that whatever may be the underlying mechanism of essential hypertension, the actual initiating cause has

not been demonstrated. Various authors propose as causes: ^{2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27.}

1. Chronic alkalosis.
2. Psychogenic disturbances producing a kind of "vascular hysteria."
3. Hereditary predisposition (abnormal gene or gene-complex).
4. An increased arteriolar tone from neurogenic sources.
5. An increased arteriolar tone caused by a substance produced in the kidneys.

The arguments in support of the first four causes do not seem convincing. One of the greatest arguments for the neurogenic theory is the effect produced by various operative procedures on the nerves for the relief of hypertension. However, such effects are not consistent and often are not lasting. ^{28, 29, 30, 31, 32, 33, 34, 35, 36}

More convincing is the experimental work on animals based on the theory that essential hypertension is caused by a humoral substance called renin, which is elaborated by the kidneys. When this substance is activated in the blood it forms angiotonin which causes a spasm of the arterioles. It has been shown that interference with the renal circulation intrarenally or extrarenally will cause hypertension. Sclerosis of the renal arterioles or of one or both of the main renal arteries will result in hypertension as mentioned above. Mechanical interference with the blood flow extrarenally or intrarenally, produced experimentally in animals in one or both kidneys, produces the clinical picture of essential hypertension. ^{37, 38, 39, 40, 41} So it is apparently this obstruction of the blood flow to one or both kidneys that causes the production of renin.

We have no practical kidney function test that will demonstrate changes in the kidneys in the usual case of essential hypertension. Practicing physicians do not have at their disposal the means for tests to determine the presence of renin or angiotonin in their patients' blood. There is also no way to demonstrate arteriolar or capillary changes in the kidney except by actual biopsy, a procedure which is obvi-

ously neither practical nor desirable. No definite causes have yet been assigned for these changes in the kidney vessels that result in the production of renin. ^{41, 42}

Experimental work on the use of kidney substance that is antagonistic to angiotonin, and counteracts its effect, is not complete and the substance itself is not yet available for clinical use. This substance has, however, been used to counteract hypertension produced experimentally in animals and as a treatment for essential hypertension, both the mild and malignant types. Following the administration of this substance, the blood pressure drops and symptoms are relieved in about 90 per cent of cases.

It is an interesting fact that in advanced malignant hypertension with papilledema hemorrhages and exudates in the fundi, the finding in the eye grounds begin to disappear and the patient's vision markedly improves shortly after the above treatment is begun, and even before the blood pressure drops.

Nothing is known about the physiologic balance existing between these pressor substances and their antagonists in the normal person. It may be possible that a deficiency of this antagonist allows an overactivity of the renin in the first place, but we do know that hypertension lasting over a period of time causes arteriosclerosis, and no doubt does contribute to the progress of the original changes in the renal vessels. We do not know why some cases of essential hypertension progress rapidly to the malignant phase, while others do not. In some patients the hypertension may remain almost at a standstill for an indefinite period. In others, while definitely not of the malignant type, it does progress much faster.

Factors that influence the beginning and the course of essential hypertension need more careful study by physicians who first see these cases. We need more opportunity to study these conditions in their incipency. In 1934⁴³ one of us (H.M.D.) made a study of 322 cases of hypertension occurring in office practice over a period of 6½ years, excluding advanced cases seen in consultation or in the hospital only. The most significant finding brought out by this study

was the fact that 240 (75 per cent) of these patients did not know that they had hypertension when they came for examination. Some did come for symptoms caused by their hypertension, but most came for some other condition, or for yearly health examination and the hypertension was found incidentally. These 240 patients' blood pressures ranged from just above normal to over 300. Obviously, we need to extend our health examinations beyond those made in school and college, beyond those made by business and industrial companies, to include all of our patients and their families. Some progress has been made in including a small percentage of our patients to have yearly health examinations, but most people still go to their doctor for one or two reasons only; they either hurt, or they are scared. Before much progress can be made to better this situation, educational programs by medical societies must be extended through the cooperation of all practicing physicians to reach individual patients.

Certainly, the curability of hypertension is in inverse ratio to its duration.

Another hindrance to the proper study of the causes of hypertension is the feeling of inadequacy with which most of us approach patients suffering from this condition. This feeling produces in the physician an inhibition against doing too much diagnostic work on a patient when he is unable to tell the patient what possibilities of success there may be, even in percentage. In these circumstances the physician hesitates to put his patient to much trouble or to much expense. Some patients, because they feel well, don't see the necessity for a thorough examination.

With due consideration for the above facts, for what is known and for what is unknown concerning hypertension, each of us as physicians must prepare a definite scheme of procedure for the examination of such patients and must do all we can for the prevention of hypertension. Such a planned procedure for the examination of these patients will be a great step forward in preventing the mistake of using palliative measures only, until the patient

is beyond all help.

In considering a scheme for the examination of patients with hypertension, it is difficult to exclude any of them, even those who evidently belong in the first class: the patients with arteriosclerosis. Many patients in their 6th and 7th decades with hypertension and easily demonstrable arteriosclerosis, do improve symptomatically on treatment, their blood pressure readings are lowered, and the advancement of their disease is apparently slowed. So far as the purpose of this discussion is concerned, however, we wish to exclude these cases and to consider only patients with essential hypertension and those belonging to the class 2 mentioned above, in whom the cause of hypertension may not be evident from the usual examination and requires special study.

In some patients with endocrine imbalances and hypertension, the endocrine condition is evident from the history and clinical findings, but this is not true of all such cases. We must not overlook the possibility of an endocrine cause in any case of unrelieved hypertension.

Most patients with hyperthyroidism show their condition by frank symptoms. That this is not always true, however, is evidenced by the repeated warnings in medical literature urging physicians not to overlook this condition as a possible hidden cause of cardiovascular symptoms in patients beyond middle life. Well controlled and, possibly, repeated basal metabolic readings are our best diagnostic help in such cases.

Hypothyroidism is more apt to be hidden than is hyperthyroidism. One would not make a wrong diagnosis in a case bordering on myxedema but some patients with hypothyroidism have no symptoms, and others, instead of being lethargic, fat, with dry skin and dry hair, are underweight, mentally overalert, sometimes irritable, with skin and hair showing no changes.

The basal metabolic reading is not reliable in diagnosing hypothyroidism because disturbances of other endocrine glands often produce a lowered basal rate. Our best diagnostic aid at present is an increase in the blood cholesterol without

other evident causes. Its return to normal with the administration of thyroid extract is the best evidence that the patient is receiving the proper dosage.

The rise of blood pressure in some patients during the menopause and its return to normal following proper treatment needs no comment. As a rule but not always, the hypertension is accompanied by the usual symptoms and at times a rise in blood pressure after menopausal symptoms have ceased is relieved by the administrations of estrogenic hormone. We must not overlook the fact that patients during and following the menopause often have an accompanying hypothyroidism.⁴⁴ In such cases the administration of thyroid extract in addition to that of the estrogenic hormone may be necessary for the successful treatment of an accompanying hypertension.

When a hypertension occurring in the presence of an endocrine imbalance is not relieved by the correction of that imbalance, other causative factors should be sought. In such cases the endocrine condition may be a precipitating factor added to a subclinical basis as will be suggested in the discussion of focal infections.

Since we do not know the actual causes of essential hypertension nor the threshold point of its clinical manifestations, we may assume that somewhere in the patient's life something has happened to prepare the kidneys for the production of this condition, but that this condition does not become clinically apparent until the process is sufficiently advanced or until some precipitating factor becomes active. In some cases we believe that this preparatory condition is either an acute or chronic infection and that the precipitating factor becomes active. In some cases we believe that this preparatory condition is either actual physical changes in the arterioles of the kidneys below the threshold point of symptom production, or it may be a sensitization of the vascular tissues.

Lichtwitz⁴⁵ states that acute diffuse glomerulonephritis occurs as a result of sensitization and considers it a constitutional disease rather than one limited to the kidneys. The allergic nature of this disease

has been proved by the injection of the antigen (horse serum and eggwhite) into the renal arteries of previously sensitized animals. The same pathologic process has been produced in rats and in rabbits by the intravenous injection of an antikidney serum. These injections produced both clinical and pathological findings of acute diffuse glomerulonephritis. Schick⁴⁶ called attention to the similarity between the glomerulonephritis following scarlet fever and that following serum sickness and emphasized the fact that the time interval with the appearance of the disease was the same in the two conditions; that is, 17 to 21 days.

If acute streptococcic infections produce changes in the arterioles of the kidneys that result in hypertension, either by organic changes or by sensitization, it seems possible that focal infections may cause the same process but to a lesser degree and more slowly. Therefore, in a case of hypertension, without evident causes, our first step should be to search for foci of infection and to eliminate them. Clinical experience bears out the advisability of this procedure. In some of our patients with a definite and sustained rise in systolic pressure and a corresponding high diastolic pressure, the blood pressure has gradually returned to normal and remained so over a period of years to the present time after eliminating foci of infection which were most frequently found in the tonsils and about the teeth.

We may assume that in these cases changes causing the hypertension were minimal and below the point necessary to sustain the abnormal blood pressure without the continued effect of the infection. In other patients the blood pressure has decreased following the removal of foci of infection, but did not return to normal. In such cases we may assume that original damage has been above the threshold point of continuing the effect on the blood pressure, or that other factors were active and should be sought.

In still other cases of this kind, removal of foci of infection has had no effect on the blood pressure. In either of these two

groups, a thorough kidney study should be made. We may start this ourselves by making a complete examination of all single specimens of urine for 24 hours. Albumin, casts, pus or blood from affected areas in the genito-urinary tract often appear in showers only. Single specimens may be normal and 24-hour specimens may be too dilute to be diagnostic. It is seldom that single specimens for 24 hours will not show these showers if they be present. Most of us can also do an intravenous pyelogram in a search for evidence of urinary obstruction, changes in the kidney pelves, and changes in or about the kidneys themselves.

We believe, however, that these patients should have a thorough diagnostic study by a urologist, and such treatment by him as may be indicated. This viewpoint is justified by the results obtained through the surgical treatment of obstructions, aberrant vessels, infected kidneys, contracted kidneys and the like.^{47, 48, 49, 50, 51, 52, 53, 54} Treatment of chronic infection in the genito-urinary tract has cured, or at least alleviated, the process in some patients.

Another possible cause of essential hypertension is sensitization to foods.^{55, 56, 57,}

^{58, 59, 60, 61, 62, 63, 64, 65} The possibility of allergy being a factor in the production of hypertension was suggested by the observation that in certain cases of bronchial asthma with hypertension, following the administration of adrenalin, the blood pressure was lowered instead of being raised. It has been suggested that the administration of adrenalin be used as a test to determine if sensitization be a causative factor in cases of hypertension. However, the reliability of this test has as yet not been determined.

There are sufficient cases on record to demonstrate the fact that in many patients with typical finding of essential hypertension, the blood pressure may be lowered at will by the omission of certain foods from the diet and raised to former levels, or above, by again including these foods in the patient's diet. Some believe that sensitization to foods is the actual causative factor of the hypertension in such cases, but

others are of the opinion that the allergic reaction acts only as a precipitating agent.

Since skin tests for sensitization to foods are recognized as being approximately 50 per cent accurate, and the use of trial diets may require much time and trouble to determine clinical sensitivity, we suggest the following test for determining if food sensitivity be an active factor in such patients:

For seven days give the patient nothing by mouth but water, dextrose, and salt. When the causative foods are omitted from the diet, it is the opinion of competent allergists that the blood pressure drops remarkably in from two to five days. If no such drop occurs in seven days we believe that allergy may be ruled out as a causative factor. The patient should be examined every day during the seven days of this test. If and when the blood pressure does drop to a sufficient degree, skin tests and other diagnostic procedure should be carried further to determine the offending foods.

There is some evidence to suggest that disorders of vitamin metabolism may play a role in the production of hypertension.^{66, 67, 68} Large doses of vitamin C, 100 mg. a day, have been administered to patients with essential hypertension with resulting reduction in the blood pressure in some, whereas in others relief of symptoms was obtained without the lowering of blood pressure. The administration of vitamin C together with vitamin B complex was more effective. In all cases, however, when the vitamins were discontinued the blood pressure returned to its former level.

There is possibility that the use of vitamin C and nicotinic acid may be important in the prevention of essential hypertension in some patients.

If the basis of essential hypertension does depend on changes in the arterioles of the kidneys, then the prevention of this disease must consist in preventing such changes or in stopping the process before it reaches the point of producing clinical evidence of the disease. From the standpoint of our present day knowledge, the most logical cause for the production of these changes

in the arterioles of the kidneys seems to be the infectious diseases as a whole.*

We have always made routine examinations of one or more specimens of urine in all cases of infectious diseases that we have treated. Occasionally, we have found specimens showing albumin and casts, and in some cases red blood cells in addition. In practically all cases these findings have not been accompanied by a rise in blood pressure and have cleared in a short time without treatment. It is generally assumed that such findings in the urine are the normal accompaniment of fever, but this has not been proved.

We have routinely examined specimens of urine at the end of the third week after the beginning of the infection. It is at this time, as has been mentioned, that evidence of acute nephritis appears, unless the vascular tissues have been sensitized by former attacks. It is possible that if we had examined specimens at that time, evidences of nephritis might have been found that were not present at an earlier time. In most cases of acute glomerulonephritis that we have seen, evidences of the disease appeared not in the third week but much earlier and during the stage of active infection. In such cases, having a normal blood pressure and normal urinary findings at the beginning of their infectious disease, it is necessary to assume that the vascular tissues have been sensitized by previous infections thereby allowing the early response with evidence of nephritis; that is, hypertension with presence of albumin, casts and red blood cells in the urine.

Here we have evidence of the lasting effect of infection on arteriolar tissue without clinical symptoms. It seems possible then that chronic or acute infections may have some selective action on the kidney vessels, falling short of producing clinical evidence of acute glomerulonephritis and yet being sufficient to cause the changes that are responsible for the production of essential hypertension.

For several years, Dr. John W. Daniel, Sr., of Savannah, Ga., has been working on the problem of acute nephritis. Lichtwitz⁶⁹ stated that "no drug can influence

the processes underlying acute glomerulonephritis," but Dr. Daniel⁷⁰ has discovered a treatment that does affect the disease in apparently a large percentage of cases.

Stated briefly, his treatment consists of the intravenous administration of vitamin C and nicotinic acid. According to the urgency of the disease, two to four doses are given in 24 hours: 100 to 200 mg. of the vitamin C and 100 mg. of the nicotinic acid. As the patient improves the number of the intravenous doses is lessened and oral administration is substituted. Patients in coma and anuric for more than 24 hours have responded to this treatment, their blood pressures have returned to normal in less than one week and remained so for a number of years. Some cases of chronic nephritis have been improved by this treatment. Acute focal nephritis is treated in a similar manner.

Other than the reference above we can find no reports on experimental work with these vitamins in vascular and renal diseases. Clinical observations are not sufficient to suggest how they may best be used for the prevention of acute glomerulonephritis. Certainly, neither Dr. Daniel nor ourselves are proposing their administration for all patients with infectious diseases, but we can state that their use in all cases of infectious diseases showing any signs of kidney involvement or rise in blood pressure is indicated. By this means we hope to accomplish the prevention of some cases of glomerulonephritis and essential hypertension as well.

In addition, we propose the further watching of all patients with infectious diseases with a checking of their blood pressure and examination of the urine not only during the acute attacks, but at the end of the third week after the beginning of their disease.

Certainly we, as practicing physicians, should not complacently hope for an early elaboration for clinical use of the antagonist for angiotonin, but should from our clinical standpoint continue to attack aggressively the problems of the causes, treatment and prevention of essential hypertension.

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The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

MEDICAL CONSERVATION OF MANPOWER IN A SHIPYARD

ROBERT L. BROWN, M.D.
Brunswick

Medical conservation of manpower in a shipyard means utilizing every available man and keeping the lost time from injury and illness at a minimum. Technics which have contributed to this end at the Brunswick Shipyard of the J. A. Jones Construction Company, Inc., will be briefly described.

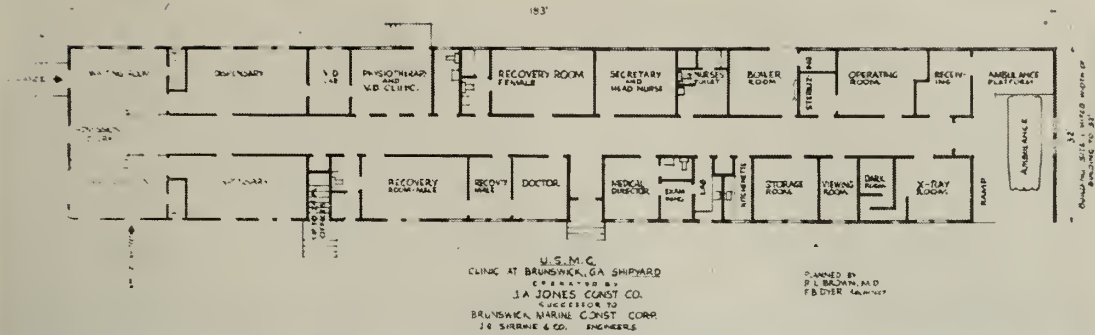
An important role is played by the pre-employment examination. In a large industry it is possible to find a place for nearly everyone who wishes to work. Our examining department is located in the employment building directly across the hall from the interviewers who assign applicants to various jobs. This proximity to the interviewers greatly facilitates the process of changing a prospective employe from one job for which he is not physically qualified to one which he can do without risk of harm to himself or his fellow workers. Applicants fill out and sign the part of the examination card relative to their past medical history while waiting to enter the examination room. They then enter the medical examination section where a nurse checks vision, hearing, blood pressure, weight, nose, throat and teeth. Findings are recorded by a clerk. Another nurse then takes a blood specimen for a Kahn test. We use Keidel tubes for this purpose and find them very satisfactory. The applicant then takes his examination card and enters one of the three dressing rooms. When called by the examining physician he enters his office where heart, lungs, abdomen and extremities are checked, examination for hernia carried out, and physical status evaluated and classified. The applicant is placed in one of four groups. Class 1—no defects. Class 2—minor physical defects present but applicant physically able to do any work on the yard. Class 3—major defects

present but applicant physically qualified for some particular job. His record must be reviewed by the examining physician before he can be transferred to any other work. Class 4—physically unable to perform any work on the yard. The examining physician then checks the employment slip for the job for which applicant is slated and if he finds that it does not fit the applicant's physical qualifications, he contacts the interviewer who made the assignment and a change is worked out. The examining physician also fills out a form on all Class 3 cases which states the nature of the defect. One copy is sent to the employe's supervisor, another is clipped to his personnel record and a third is kept in the medical department. If the prospective employe is to be restricted to ground duty the examining physician makes a notation to this effect on the applicant's employment slip.

We established our criteria for replacement by first learning as much as we could about what each job entailed and then outlining the physical requirements with the aid of the heads of the various departments concerned, the safety engineer, and the personnel director. It is better to base requirements on conditions actually known to be present in your own yard rather than to follow those which someone has found helpful in some other yard or industry. The criteria which we have been following are shown in Table 1. To keep in touch with changing conditions our examining physician spends one afternoon a week, whenever possible, familiarizing himself with operations and checking up on the performance of handicapped individuals.

With the set-up just described and with the aid of two nurses and two clerks, one physician was able to examine 3,438 applicants during the month of April, 1943, the highest daily total being 196. This was done without resorting to mass examinations.

The results of 12,784 pre-employment examinations are shown in Table 2. The rejection rate has been lower during the past month when of 3,438 applicants only 0.4 per cent have not been accepted. A



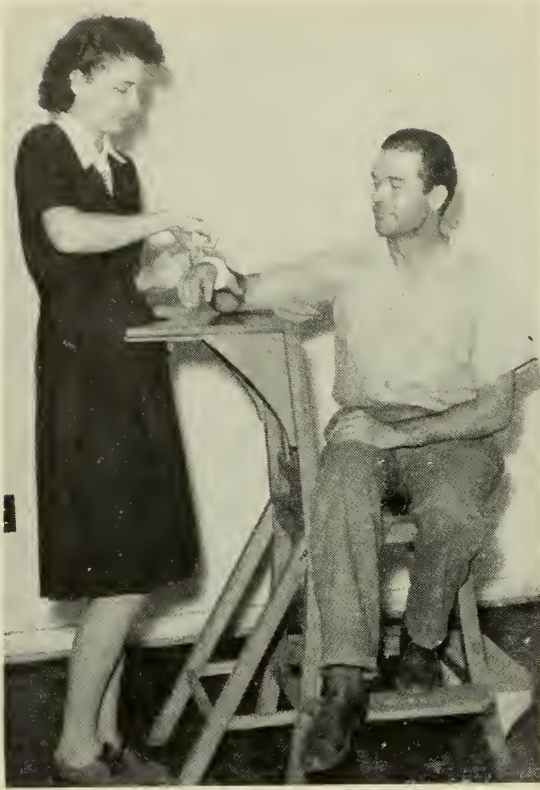
study of the Class 3's reveal that they fall into the categories shown in the Table 3. Hernia so far has not proved to be a serious hazard. Only one strangulation has occurred and in no case has the presence of hernia contributed to an accident. Visual defects deserve special consideration. We restrict men with one eye to ground duty. That means that they do not work on the shipways or on the ships and are not exposed to the risks entailed in climbing and in working on scaffolds where a misstep due to poor vision might lead to a serious fall. One-eyed men are not employed as riggers because we feel that having a blind side greatly increases the chance of injury from steel that is being moved by cranes. Welding requires good vision and our requirement is 20/40 or better in each eye. There are many other jobs in a shipyard, however, which a person with one eye can perform very satisfactorily as evidenced by the fact that 74 men with one eye missing and 68 with vision 20/300 or less in one eye are doing creditable work daily in our yard. The loss of an extremity does not disqualify an applicant. We have men with one arm working as steelcheckers and men with leg amputations working as machinists.

The main yard clinic or infirmary should be located centrally in the yard and supplemented by first aid sub-stations. Figure 1 shows the floor plan of our yard clinic. A worker with a minor injury having secured a clinic pass from his supervisor enters the waiting room where an admission clerk types out his accident card and writes

the time of arrival on his clinic pass. He then goes into one of the dispensaries where he is treated. The nurse or physician who attends him writes the description of the injury and the treatment given on the accident card, writes time of departure on clinic pass and sends the patient back to work. A more seriously injured patient would be lifted by crane from the hold of a ship in a wire basket stretcher, equipped with a wool blanket, and transferred by ambulance to the clinic. He would be brought into the receiving room, x-ray room or operating room as the needs of the case might dictate. Recovery rooms are provided for both men and women workers. Doctors' offices, a physiotherapy room, a general office, sterilizing room, store room and rest rooms for nurses, doctors and patients complete the set-up. In this building we are caring for over four hundred patients daily without congestion or confusion.

A first aid station staffed by a graduate nurse is located close to the shipways. Only minor injuries and redressings are treated here. All cases which need to see a physician are referred to the main yard clinic. A simplified record form is used. The treatment chairs used at both the main clinic and first aid station were made at the yard and are proving very satisfactory. The general treatment chair shown in Figure 2 enables a nurse to care for an injured hand without bending over.

In addition to the injured, many non-industrial cases among employes are cared for. This group is made up for the most part of employes who become ill on the job.



A sick patient's temperature is recorded and his general condition evaluated. If he is too ill to continue work he is aided in securing transportation home. If he does not have a private physician he is assisted in contacting one. If the employee's illness is minor and amenable to simple measures of treatment these are given and he is sent back to work.

The medical department conducts a sanitary inspection of the yard each week, sees that salt tablets are made available in hot weather and cooperates with the maintenance department in providing fresh drinking water for the workers. Each physician spends an afternoon every week on the yard in order to keep familiar with yard operations and with employee's needs.

Another important function of the medical department is to cooperate with local, state, regional and national public health groups and with industrial hygiene consultants from the Maritime Commission. Through the cooperation of the Georgia State Department of Public Health 3,088 chest x-rays were taken last fall. Forty-seven of these were reported as suspicious and have had a clinical follow-up. So far

only 6 cases with definite active tuberculosis have been found although several others are being watched carefully and checked periodically by chest x-rays. Venereal disease control is an important project in which the yard medical department cooperates with the local Board of Health. A Kahn test is taken on all applicants for employment. The results of these tests are shown in Table 4. Those having positive tests are notified and advised to secure treatment either from the Board of Health or from a private physician (since this paper was read a venereal disease clinic has been established on the yard staffed by Public Health personnel). Laboratories of the Industrial Hygiene Service of the Georgia Department of Health have been very helpful in specialized analyses of industrial hazards from fumes, dust and lead. The National Institute of Health at Bethesda, Maryland, has facilities for analyzing urine samples for lead content. Visiting specialists from the Department of Agriculture have been helpful in connection with problems concerning food and nutrition. Shipyard medical departments should welcome aid from all of these groups and by working with them raise the standards of industrial medical care and of community health.

It is important for the shipyard medical department to cooperate fully with the safety department. This can be facilitated if the two are located near each other. Complete and accurate records are essential. The accident record card should contain information which the safety department needs in order to investigate and analyze accidents. In addition, they should receive a notice whenever an employee is sent home because of injury and another notice when he is able to return to work. Not infrequently injured workers will give the physicians or nurses information regarding hazards in connection with working conditions which will be of value. This should be communicated to the safety department or better still a safety inspector can be called and given a chance to get the information direct from the injured employee while he is under treatment. In the course of his yard walks and sanitary inspections, a shipyard phy-

sician may notice hazards which can be eliminated through the cooperation of the safety department.

TABLE 1

PHYSICAL REQUIREMENTS FOR EMPLOYMENT
AT BRUNSWICK SHIPYARD OF THE
J. A. JONES CONSTRUCTION
COMPANY, INC.

1. SHIPFITTERS
 - a. Will be accepted with loss of one eye if restricted to ground duty.
 - b. Must have use of both upper and lower extremities.
 - c. Will not be accepted with marked impairment of hearing.
2. WELDERS
 - a. Will not be accepted with loss of one eye or with bifocal glasses.
 - b. Will not be accepted with material impairment of upper extremity. (This applies primarily to applicants for the training school. A few experienced one-armed welders have been accepted).
 - c. Will be accepted with artificial lower extremity if restricted to ground duty.
 - d. Will not be accepted with marked impairment of hearing.
3. SHIPWRIGHTS
 - a. Will be accepted with loss of one eye if restricted to ground duty.
 - b. Will not be accepted with loss or material impairment of any extremity.
 - c. Will not be accepted with marked impairment of hearing.
4. BURNERS
 - a. Will be accepted with loss of one eye if restricted to ground duty.
 - b. Will not be accepted with loss or material impairment of upper extremity.
 - c. Will be accepted with artificial lower extremity if restricted to ground duty.
 - d. Will not be accepted with marked impairment of hearing.
5. CHIPPERS
 - a. Will be accepted with one eye if restricted to ground duty.
 - b. Will not be accepted with loss or material impairment of upper extremity.
 - c. Will be accepted with artificial lower extremity if restricted to ground duty.
 - d. Will not be accepted with marked impairment of hearing.
6. RIGGERS
 - a. Will not be accepted with loss of one eye.
 - b. Will not be accepted with loss or material impairment of any extremity.
 - c. Will not be accepted with marked impairment of hearing.
7. CRANE OPERATORS, LOCOMOTIVE ENGINEERS
 - a. Will not be accepted with loss of one eye.

Vision must be 20/40 or better in both eyes.

- b. Will not be accepted with loss or impairment of any extremity.
- c. Will not be accepted with impairment of hearing.
- d. Must be re-examined every six months.
8. PIPEFITTERS, OUTSIDE MACHINISTS
 - a. Will be accepted with one eye if restricted to ground duty.
 - b. Will not be accepted with loss or material impairment of any extremity.
 - c. Will not be accepted with marked impairment of hearing.
9. INSIDE MACHINISTS
 - a. Will be accepted with loss of one eye.
 - b. Must have unimpaired use of hands.
 - b. Will be accepted with loss or impairment of lower extremity.
10. WOMEN YARD WORKERS
 - a. Will not be accepted if pregnant.
 - b. Must conform to physical requirements for men in similar occupations.

Applicants who have active tuberculosis, decompensated heart disease, disabling arthritis, cancer, severe asthma, hypertension over 200 mm., varicose ulcer, epilepsy, venereal disease in infectious stage, contagious disease, or acute febrile illness will not be accepted. Asymptomatic hernia is not a cause for rejection.

In a large yard there are many different types of work. Individuals who do not qualify in the groups listed above are placed in other jobs which they are physically able to perform.

TABLE 2

Total number of pre-employment examinations	12,784
Number in Class 1 and 2.....	11,987 or 93.8%
Number in Class 3	716 or 5.6%
Number in Class 4	81 or 0.6%
The number of Class 4 cases in the last 3,438 examinations was	14 or 0.4%

Nearly everything that has been said in this paper has a bearing on reduction of absenteeism and on the conservation of manpower. An additional measure that helps to reduce absenteeism allegedly due to sickness is to require employes who wish to go home because of illness to be examined at the yard clinic and to be sent home from there if the state of their health warrants it. Granted that it is difficult to keep a person at work who wants to go home, nevertheless by keeping careful records the habitual offenders are found and in not a few instances some simple measure of treatment will enable an employe to return to work rather than to go home for the rest of the day. A visiting nurse service is under

TABLE 3
CASES IN CLASS 3

Hernia	309
Poor vision in one eye	242
20/50 to 20/300	100
20/300 or less	63
One eye missing	74
Deformities	30
Heart disease	21
Ankylosis of joint	19
Impaired hearing	12
Marked varicose veins	8
Asthma	7
Underweight	7
Obesity	7
Amputation of arm	7
Amputation of leg	6
Tremor	6
Chronic osteomyelitis	5
Peptic ulcer	4
Amputation of hand	3
Chronic back strain	2
	716

TABLE 4

RESULTS OF KAHN TEST TAKEN AT TIME OF
PRE-EMPLOYMENT PLACEMENT
EXAMINATION

Total number of Kahn tests	12,784
Per cent total found to be	
positive	52 per 1,000 or 5.2%
Per cent of tests on white appli-	
cants found positive	27 per 1,000 or 2.7%
Per cent of tests on colored appli-	
cants found positive	200 per 1,000 or 20.0%

discussion at present but has not yet been put in operation. We believe that it will be of definite aid to employes who are ill and will contribute to the reduction of absenteeism.

Summary

Accidents and physical breakdown can to a considerable degree be prevented by fitting the employe's physical qualifications to his job. The pre-employment placement examination is thus an important function of the medical department in its effort to conserve manpower. The prompt and effective care of injuries and the early detection and treatment of illness obviously contribute to the lowering of time loss. Full cooperation of the shipyard medical department with local, state, regional and national public health groups in their endeavor to prevent illness by proper sanitation and

nutrition and by modern methods of control of contagious diseases, tuberculosis and syphilis results in better health of workers and their families with resultant conservation of available manpower. These agencies and the Maritime Commission through their industrial hygiene departments are helpful in aiding the detection and control of health hazards in industry. The work of the shipyard safety department can be aided and made more effective if the medical department keeps accurate records and gives the safety department full cooperation. The technics which have been followed at the Brunswick Yard of the J. A. Jones Construction Company, Inc., in these functions of the medical department have been briefly described. What we have been able to accomplish at Brunswick would not have been possible were it not for the fact that the management of the company and the resident engineer of the Maritime Commission, from the beginning, have been understanding and helpful in every way.

DISCUSSION ON PAPER OF DR. ROBERT L. BROWN

Dr. J. W. Simmons (Brunswick): It is with a great deal of pleasure and some degree of pardonable pride that I have listened to this paper of Dr. Brown, because I preceded him as part-time physician on a fee basis for six months during the construction of this magnificent yard. Having studied the set-up needed, and conferred with the President of Brunswick Marine Construction Corporation, then in charge of the yards, together with the Maritime Commission representatives, their engineers and architects, we were able to get the nucleus of the present adequate facilities mentioned by Dr. Brown. When we submitted rough draft of the clinic and estimate of the probable cost of buildings and equipment, Mr. Moxham, the President of the Brunswick Marine Construction Corporation, threw up his hands and exclaimed: "We can't spend the people's money like that." To this I replied: "This is a very meager beginning. The people's money will be spent to conserve manpower, adequately care for the injured, reduce accident incidence, prevent absenteeism from minor illnesses and minor injuries, to properly place every usable man." The results Dr. Brown has achieved, therefore, have been at costs far above the original estimates, bearing out my prediction. These are the reasons for my deep personal interest in his program, aside from my intense patriotic desire to see every available man and woman on the war jobs all the time, and working at those war jobs with every ounce of their energy and strength.

Dr. Brown has an expensive set-up in equipment

and personnel, and he has gotten it through the team work of management, personnel and employment departments, the engineering department, the Maritime Commission, the insurance carrier, as well as the wholehearted support of his medical and nursing staff. He is also lucky to have the active cooperation of the safety engineer and his aids. Aside from these cooperative endeavors, the consultative services of the Health Commissioner of Glynn County, the assistance of private practitioners in Brunswick, the wonderfully expert services of the Industrial Hygiene Bureau of the Georgia Department of Public Health through its director, Dr. L. M. Petrie, have been at the command of Dr. Brown.

Organization and direction have shown results in putting to work in this shipyard men and women who would be considered unemployable in most peacetime industries with a minimum of harm to the workers themselves, their fellows and the material with which they work. Some men and women who never made a dime in wages before are now earning—save the mark—wages they never dreamed of; and, strange to say, the absenteeism is not prevalent in this class, but in the regular, old-time artisans who are addicted to their drinking.

The J. A. Jones Construction Company has a contract for the building of 85 Liberty and Victory ships in this yard. Your interest in this matter of employability, medical and surgical care, placement and absenteeism is a vital one. You are paying for it—all of it—in income, Victory and excise taxes. You are paying for it in an expensive bureaucracy of supervision of all angles of war production, conservation in food and manpower, to say nothing of the wasted hours of the habitual absentee. You can, and should, do something about it. Mr. J. A. Jones told me personally about a month ago that his absentee rate was from 10 to 20 per cent daily among 10,000 employees—the highest in any shipyard in the United States. I told him, and he agreed, that one of the causes of this was obvious—liquor drinking. Brunswick's chief of police and police court recorder agree that this one thing results in more days lost from work, spent in drunken orgies, in jail cells and at police and other courts, than are lost from any other one cause. Yet we find no employer of labor, no President of the United States, no Senator, no Manpower Commissioner, no labor union leaders ever mentions this saboteur. It is plain that I am speaking on an unpopular subject when I condemn the liquor traffic; but by my own conservative estimate—based on personal observations in my practice among these war workers—it is that 25,000,000 man-hours are irretrievably lost every month on account of habitual pay-day drinking.

I think I have about consumed my allotted time. If I say more I might get rough. I thank you.

Our principal task now is to extend tuberculosis control activities so as to reach the greatest number of workers and their families in the shortest possible time, making full use of all private and public resources. With energetic use and concerted action, the final eradication of tuberculosis from the United States is well within our grasp.

GEORGIA'S POSTWAR PUBLIC HEALTH PROGRAM

T. F. ABERCROMBIE, M.D.

Atlanta

Some Americans fail to see that our old way of life is past. Our yesterday is dead. Today is dying. Engaged in fighting a global war, few of us pause long enough to realize that dissatisfaction with existing conditions and desire for a better way of life led us into the present conflict. The world is now involved in a revolution—the process of overthrowing a materialistic existence for a way of life that takes into consideration all human needs. As Hugo said, "Would you realize what Revolution is, call it Progress; and would you realize what Progress is, call it Tomorrow." It is up to us to write the blueprints for tomorrow. Are we big enough to do it?

We are not only in a state of revolution regarding civil affairs but our people are revolting against inadequate medical and health services. They demand better medical care, adequate health protection. The practices of yesterday will not suffice for the peoples of tomorrow. We must align ourselves more closely in league with the future.

Too many people are ill from preventable diseases to suit the generation of tomorrow. The mothers of the future must be prevented from dying in childbirth. They are entitled to adequate medical and nursing care. Too many infants succumb before they reach their first birthday.

Enlightened people will not continue to tolerate the heavy toll that tuberculosis exacts yearly. Our eradication of venereal disease is painfully slow and exorbitantly expensive. Too many Georgians are undernourished, and needless mental breakdowns occur. Cancer, heart disease, and nephritis strike down too many people in the prime of life. Pneumonia exacts a disturbing toll.

Tomorrow's people will insist upon a place where the underprivileged can go for hospital treatment. Except for specific

Read before the Medical Association of Georgia, Savannah, May 10, 1944.

diseases, a large part of the rural population now has no facilities for hospital care of the indigent and underprivileged.

There were, in normal times, large areas in this State where medical services of any kind were meager or lacking altogether. War has intensified this problem. Our public health and medical facilities reach far too few of the actual needy.

Have we the courage to seriously face these problems and try to find a solution for them? Have we the leadership necessary to do the job that should be done? We have built our economy in the past on material things — dollars and cents — and left unsolved the problem of human needs.

After the war is over there probably will be an urge to spend millions for building roads, for erecting fine and expensive buildings, and for granite or marble memorials to our soldiers who have died in the defense of our country. This must not be done at the expense of human needs. We cannot afford to foster the very thing that has brought about the present revolution.

As soon as the fighting is over we should take into immediate consideration the paramount importance of health and medical care. Tuberculosis must be wiped out; venereal disease controlled; and mothers and babies given better care. The appalling number of mental breakdowns must be reduced. Medical care must be more adequately distributed. We cannot turn a deaf ear to all these vital needs.

What then can we of today do to help provide a better tomorrow in health and medical care programs? First, I think we need a research program — not merely surveys and planning. I have in mind a real research organization adequately financed and staffed with well trained personnel. Such an organization, by exploring all phases of any contemplated project, could keep both medical and health groups from going off at tangents on unsound programs. Research could lead us into new and more useful fields with projects that would have the backing of scientific counsel.

Such a research organization is not beyond the realm of possibilities. Governor Arnall sponsored at the last session of the

legislature a law creating the Agricultural and Industrial Development Board of Georgia, composed of twenty-one members. The work of the Development Board is divided into seven panels of three members each. One of the board's panels is on health. Each panel is to have a full-time director with an adequate staff of trained people devoting their entire time to research and development. This board has great possibilities for the guidance and development of the future welfare of our State.

The Health Panel will study all the specific health problems that now confront us, none of which is more acute than tuberculosis. To make it more effective, our present tuberculosis program should be revamped. Our thought is to have the surgical treatment unit near Atlanta for obvious reasons. The Sanatorium at Alto is so isolated that it is difficult to keep there an adequate staff of trained men and women. Another advantage of an Atlanta location would be the availability of consultative services. Too, interns from the medical college could be utilized to the advantage of the institution and for teaching them more about tuberculosis. We are advocating a subsidy for county and city tuberculosis hospitals, thereby encouraging each community to assume more responsibility for its own control program. We are proposing a more intensive tuberculosis case-finding program, by placing more diagnostic units in the field, and also a more stringent isolation policy for active cases. There is another phase of an expanded tuberculosis program that requires considerable thought; that is, the large number of Negroes who have tuberculosis and require custodial care. It may be necessary, in the early part of an expanded program, to construct one or more hospitals for accommodating this class of patients until the disease can be brought under better control. With a wisely organized program, we ought to, within a reasonable time, reduce tuberculosis to the point where it will no longer be a major public health problem.

Then our method of organizing local health departments should be put on a sounder basis. Under the present law the

counties are supposed to bear all the expense of a county health department. However, with the coming of larger state and federal funds for expanding local health work and with each agency participating in the county public health program, there has been some confusion. It is thought a simple and more effective plan would be that the counties employ all nurses and sanitarians on a county basis and the State financially participate in the regional, district, and local medical and engineering personnel.

In connection with the local health departments, there should be developed well planned health center buildings, with the private physicians taking their part in the clinic services rendered. This health center, especially in rural areas, should provide for more than a venereal disease and maternal and child health clinic. It should be planned to serve the medical and public health needs of the community as a whole. It should act as a screening station for all State institutions and service clinics, such as tuberculosis sanatorium, mental hospital, and training school for mental defectives, as well as the crippled children's service, and those needy people who are not able to secure medical service through regular channels. The State would be saved much money by having these people classified as to whether or not they require or can benefit from the State services available. The clinic should serve as an adjunct to diagnostic facilities for the practicing physician, with x-ray equipment available for this purpose.

Then there is the question of hospital service for the indigent and underprivileged groups. This need is so great and the problem so complicated that I have no specific recommendations to offer at this time. This is a problem for the research and development organization to work out for us. However, I am convinced that the private hospitals cannot cope with the financial burden of treating all the indigent and underprivileged patients. This situation may require state and federal subsidies.

Then, too, we have the problem of the number of physicians available, and the number needed to give a minimum service

to all the people. The number of practicing physicians in Georgia today is 1,573 white and 140 colored. Our population is 3,123,723. Twenty years ago, there were 3,274 doctors and the State's population was 2,895,932. Now, 1,561 fewer physicians are having to serve 227,891 more people. Obviously the State needs more doctors and our medical schools should be geared to the modern requirements. The State could probably utilize double the number now being taken into active practice yearly. More medical health officers are needed. This, again, is a problem for the research organization to study.

There is urgent need for additional facilities for maternity and infant care. We say we are a civilized people, yet we allow a vast number of mothers to have their babies — future citizens of Georgia — under deplorable conditions. Twenty thousand of them had only the meager care of a midwife last year. More and better hospital facilities and maternity shelters may be the answer to this problem.

I am not unmindful of the fact that we cannot get a perfect medical and public health program overnight. I am also not unmindful of the fact that the American people have the best health record of any people in the world. Physicians and public health officers have much to be proud of in past accomplishments. Yet I am sure all will agree we have much room for improvement. Changes, some of them drastic, are in order. Growth must be allowed.

In considering the part the private physician is to play in this over-all program, the question may be raised, "Am I advocating state or social medicine?" My answer is that the people are going to have some sort of medical and public health service different from what they are now getting. If the medical and health professions do not work out some plan that will give a broader service and preserve the traditions of the medical profession, we may have some undesirable plan forced upon us. Witness the Wagner-Murray bill!

Many of the suggestions I have offered will need much thought and study. Research

and planning will be required to carry them out. Money will be necessary. However, we should face the facts and set about to find a solution to the problems. If we do not, some non-medical group will surely step in and attempt to do so. Someone has said, "It is not how fast we are traveling but it is the direction in which we are going that counts." Let's get going in the right direction.

HOUSE OF DELEGATES MEDICAL ASSOCIATION OF GEORGIA

Synopsis of Proceedings

May 9, 10, 11, 12, 1944

PRESIDENT'S REPORT: Dr. W. A. Selman, Atlanta, described conditions under which the reduced number of physicians in the State were laboring to provide ample medical care with the wholehearted cooperation of the people. Many aged physicians are doing the work of young men. Visits to district societies were limited on account of transportation facilities, yet practically all districts were reached personally by our vice-presidents. To maintain excellent qualifications for our physicians and to render the best medical care, it is hoped that the laity will urge their Congressmen and Senators to oppose such legislation as the Wagner-Murray-Dingell bill. The president was commended for his effective and skilled work.

PRESIDENT-ELECT: Dr. Cleveland Thompson, Millen, reported that he had studied the Constitution and By-Laws of the Medical Association of Georgia, also the Constitution and By-Laws of the American Medical Association and the work of the National Physicians' Committee. Less than 3 per cent of Georgia doctors contributed to the National Physicians' Committee fund during 1943. Problems that organized medicine is facing were discussed before the Eighth District Medical Society.

SECOND VICE-PRESIDENT: Dr. C. Hall Farmer, Macon, stated that he inquired frequently of the President to know if there was any work he could do that might be helpful.

PARLIAMENTARIAN: Dr. John W. Simmons, Brunswick, stated that there had been no official business worthy of comment referred to his office during the year.

He reviewed a plan that he submitted to the House of Delegates at the 1943 annual session at Atlanta, to provide some form of pension or disability payments to needy physicians, suggesting that it be made a function of the Medical Association of Georgia. The House of Delegates of 1943 passed a motion to appoint a committee, and with the help of the Association's attorney study and formulate some plan for the payment of pensions to indigent and disabled members. If such

action is taken by our Association and others, we prevent or defer the tide of socialism.

SECRETARY-TREASURER: Dr. Edgar D. Shanks, Atlanta, reported that cash and cash assets of the Association amounted to \$45,600.04, with all current bills paid. Detailed financial report, as checked by the Auditing Committee of the Council, was published in the May 1944 issue of THE JOURNAL.

County societies have reported 1,590 members for 1944; official membership today is 1885. At the end of 1942 our official membership reached its highest point at 2,006 members.

The size of THE JOURNAL was reduced on account of a paper shortage, and Medical News was discontinued until after the war, after the publication of a few issues during the early months of the fiscal year.

The scientific exhibit was omitted because our members were too busy to prepare exhibits.

The Council and Secretary-Treasurer were commended for their efficient service and sound business judgment in handling the finances of the Association.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION: The report showed that no session of the American Medical Association was held during 1943 on account of transportation facilities. The House of Delegates met in Chicago, June 7-9, 1943, with all of Georgia's delegates present.

The Distinguished Service Medal was awarded to Dr. Elliott P. Joslin, Boston.

The Speaker of the House of Delegates delivered his annual address, spoke of the responsibilities of the delegates as statesmen, who had courage, loyalty and vision. Official notice of the deaths of fellows and officers was made.

Retiring president, Dr. Fred W. Rankin, Lexington, Kentucky, spoke of the penetrating foresight of the medical profession in anticipating the requirements of the armed forces and civilians during World War II. That ample preparations should be made for everyone to have adequate medical care in the postwar period.

Dr. James E. Paullin, Atlanta, incoming president, spoke on the work of the Procurement and Assignment Service for Physicians. He suggested that frequent conferences be held between this agency and that of the War Participation Committee of the A. M. A., also that efforts should be made to relocate physicians in areas where there is an acute shortage of physicians. Postgraduate medical education should be available to physicians in civil practice.

The trustees appointed a committee on planning for postwar medical service.

The financial report of the American Medical Association showed that it had sufficient funds to invest in interestbearing trust funds, with a steady increase in funds from year-to-year.

A council has been organized to investigate matters in reference to the economic, social and other aspects of medical care for the public. The object is to avoid any appearance of a lobby, yet collect all available data. Dr. G. Lombard Kelly, Augusta and Chicago, has been appointed secretary of this new council.

The trustees arranged for the scientific sections to supply *The Journal of the American Medical Association* with material while the sectional meetings are discontinued. The trustees also urged the House of Delegates to insist that the American Hospital Association withhold its approval of the "Blue Cross" contract.

Georgia will continue to have three delegates under the reapportionment of last year.

WOMAN'S AUXILIARY: Mrs. Olin S. Cofer, Atlanta, president, made the report for the Woman's Auxiliary, which showed that the Auxiliary had done a large amount of work in the interest of organized medicine and public health.

MEDICAL SERVICE: Dr. Frank K. Boland, Atlanta, introduced a resolution. It told of the high standard of efficiency now reached in the use of penicillin, blood plasma and other therapeutic procedures, with the trained skill of the physicians and surgeons in the Medical Corps of the U. S. Army, which followed the special teaching and training they received as interns and house physicians; that to maintain high standards of efficiency we respectfully ask the President of the United States to defer recent medical graduates until they have sufficient intern and resident experience to continue to carry the high standards the Medical Corps should maintain.

MEDICAL ECONOMICS: Dr. B. T. Beasley, Atlanta, chairman, reported that no business had been referred to the committee, therefore no meeting had been called.

INDUSTRIAL HEALTH: Dr. John W. Simmons, Brunswick, suggested that employees of industrial plants be referred to their physicians when employees seek certificates to change employment. Our Association was urged to collaborate with the Georgia Department of Public Health in opposing a bill in Congress to prevent the Department of Labor from encroaching on the activities of industrial health.

MATERNAL MORTALITY AND INFANT CARE: The plan in operation for maternal and infant care of wives and infants of enlisted men is endorsed. Changes at this time are opposed. Resolutions adopted by the Minnesota State Medical Association and the Chicago Medical Society are approved.

PLAN FOR MEDICAL CARE AND HOSPITALIZATION: Introduced by the Delegates of the Fulton County Medical Society, it outlines a number of plans which have been used and gives useful data. It is replete with other information which may be useful in setting up plans for health and hospital insurance. Copy of resolution follows:

Whereas, the delegates from the Fulton County Medical Society think that a definite plan for a voluntary health program is imperative, and

Whereas, we approve the skeleton plan as set forth in these recommendations, and

Whereas, certain laws were enacted at the 1939 session of the State Legislature which can be used in these plans,

Therefore Be It Resolved, that the Medical Association of Georgia adopt these resolutions and appoint a committee to investigate the different plans as inaugurated in other states; and in cooperation with municipal, State and county authorities; and with insurance companies, manufacturers, hospital associations and the Georgia Department of Public Health work out a suitable plan for the State of Georgia.

RESOLUTION: Dr. Allen H. Bunce, Atlanta, introduced a resolution which authorized the Council to handle all matters pertaining to benefits, insurance or other funds, and that all matters pertaining to legislation and/or public policy be submitted to the Committee on Public Policy and Legislation for proper attention.

PUBLIC POLICY AND LEGISLATION: Dr. Spencer A. Kirkland, Atlanta, chairman, reported on the Wagner-Murray-Dingell bill and suggested that the public be advised of its ill effects, that literature should be distributed, speeches to various groups sponsored, and urge members of the Congress to oppose it.

The plan for emergency maternal and infant care was approved for the period of the war.

Urged military authorities to defer pre-medical students from active service so that there will be an uninterrupted supply of physicians.

All State health activities should be under direct supervision of the State Board of Health.

Dr. T. F. Abercrombie, Atlanta, Director of the State Department of Public Health, offered the following titles for bills to be introduced at the next session of the General Assembly of Georgia:

1. Change in the Basic Health Law.
2. Tuberculosis.
3. Authorize the State Board of Health to regulate the sanitation of milk and food.
4. Rabies control.
5. Department of Toxicology.
6. Revision of Vital Statistics.

HOSPITALS: Dr. Russell H. Oppenheimer, Atlanta, acting chairman, reported that hospitals will be of eminent concern to doctors in the future. Requirements for hospitals in the modern practice of medicine will be more in demand. Financial factors will not be dominant in the operation of hospitals. The income should be used to the best advantage of the patients and physicians. Hospitals must have able staffs which will include all branches of medicine and surgery, centers to educate nurses, technicians, dietitians and other employes of ability. Doctors and hospitals each have an individual service to perform and are dependent on each other. Recommended that this Association appoint a committee to confer with a committee of the Georgia Hospital Association in reference to these recommendations.

CANCER COMMISSION: Dr. J. L. Campbell, Atlanta, chairman, reported that the commission had worked with and in close cooperation with the Women's Field Army of the American Society for the Control of Cancer and the Division of Cancer Control of the State Department

of Public Health to avoid as much overlapping as possible. Literature has been distributed and other plans of advertising fostered. Cards have been mailed with the help of the Georgia Division of Cancer Control. The cancer clinics maintain a high standard of work. Numbers of cancer patients have been reported. The percentage of malignant diseases has declined. Nothing new for cancer has been recently discovered: surgery, x-ray and radium continue to be the only approved methods for the aid of cancer patients.

CANCER CONTROL: The Women's Field Army of the American Society for the Control of Cancer is young, it has become favorably known and has accomplished a lot of good.

MEDICAL HISTORY: Dr. Frank K. Boland, Atlanta, chairman of a sub-committee, reported there had been such enormous demands for the physicians' time in practice, that they have not had time to work on material for the history. When the war is over it is hoped that other data will be available to supplement what we have and that the activities and achievements due to the present war will supply many important additions.

CALHOUN LECTURESHIP: Dr. James E. Paullin, Atlanta, chairman, submitted a report that there had been no change in funds during the past fiscal year other than the addition of \$169.18 interest collected. Total fund now on hand, \$1,263.51.

AWARDS: Dr. Wm. R. Dancy, Savannah, chairman, reported that no paper or other outstanding work had been reported during the year to merit either the Crawford W. Long prize, Ware County Hookworm prize or the Hardman Loving Cup.

ADVISORY COMMITTEE TO THE STATE BOARD OF HEALTH: Dr. Edgar H. Greene, Atlanta, chairman, reported that a called meeting was held July 28, 1943. An emergency maternity and infant care program was discussed. It was approved and referred to the Council which met and adopted the plan the same afternoon, for the period of the war.

"Briefly, the plan calls for compensation of physicians and acceptable hospitals at a specified fee and per diem rate. The people authorized to receive medical care and hospitalization under this plan are wives and children of the enlisted personnel of the armed forces of the United States."

ADVISORY COMMITTEE—WOMAN'S AUXILIARY: Dr. James N. Brawner, Sr., Atlanta, chairman, reported that one meeting had been held in Atlanta, August, 1943. The President, Mrs. Olin S. Cofer, outlined the work the Auxiliary proposed to do during the year as follows: promote health education regarding nutrition, cancer control, tuberculosis and other infectious diseases. The Auxiliary has made great progress, literature has been distributed, speakers have been obtained and health films have been shown to the public.

INDUSTRIAL HEALTH: Dr. L. M. Petrie, Atlanta, reported from the activities of the State Board of Health. A medical certificate has been prepared for use by physicians when they certify that an applicant has an

occupational disease. After the examination, the certificate should be forwarded to the State Department of Public Health. This form of certificate should discourage unnecessary requests, expedite handling of worthy requests and assist employers in reassigning workers to suitable and worthy employment, also assist the Industrial Hygiene Service of the State Department of Public Health in the discovery and control of hazardous occupations. Five counties were reported to have organized committees on industrial health.

At the last session of the Legislature a committee was appointed to draw a bill for Occupational Disease Compensation. The personnel included representatives of manufacturing associations, labor organizations and the medical profession and the following recommendations were included: the law to be administered by the State Industrial Board to be all inclusive rather than a schedule law; establish a board to pass on medical facts. All cases of occupational diseases to be reported by the Industrial Board to the State Department of Public Health.

In 1943, industrial hygiene services were rendered to 113 industries in 31 counties, employe population served 163,792. Major types of service were assistance in medical and nursing study and control of individuals exposed to risk, engineering and chemical study and control of hazards in the working environment.

A survey of welders in a Georgia shipyard, with a series of others in representative shipyards scattered over the United States, is being made to show the presence or absence of risk to life or health from the inhalation of welding fumes and gases.

APPENDICITIS: Dr. T. C. Davison, Atlanta, chairman, submitted a report that the committee had not been active. When conditions improve and the members of the committee have more time, if and when the State Board of Health will supply literature, the committee will become active again. The committee believes that the work already accomplished has been the means of saving many lives.

CLINICAL PATHOLOGY: Dr. A. J. Ayers, Atlanta, chairman, reported that no meeting had been held, therefore, no report was available.

TUBERCULOSIS: Dr. C. C. Aven, Atlanta, chairman, stated that no meeting had been held but the chairman had conferred with the Tuberculosis Department of the State Department of Public Health, the secretary of the Georgia Tuberculosis Association and with county health officers. The results reported were that public health facilities were being more extensively used in cooperation with private physicians and interest in tuberculosis intensified. X-ray examinations of 60,000 industrial workers have been made by the State Department of Public Health, and many workers and rejectees from the induction center have been referred to clinics and private physicians. The Georgia Tuberculosis Association has rendered valuable service in educating the public.

An effort is being made to organize a State Chapter of the American College of Chest Physicians.

SCIENTIFIC EXHIBIT: Dr. W. F. Hamilton, Augusta, chairman, reported that on account of transportation, travel and hotel facilities, it was not practical to have a scientific exhibit in 1944.

SYPHILIS: Dr. Harold P. McDonald, Atlanta, chairman, reported that no formal meeting of the committee had been held. The committee attended a round-table discussion on social hygiene conducted by Dr. Ralph Wager.

OPHTHALMOLOGY: Dr. Grady E. Clay, Atlanta, chairman, submitted a report that no business had been brought to the attention of the committee, therefore no meeting was held. From all reports the work has been satisfactory.

ORTHOPEDICS: Dr. F. G. Hodgson, Atlanta, chairman, reported that the State Welfare Department is in charge of the care of crippled children and without the aid of a physician since the resignation of Dr. Spencer. The work is directed by Mrs. Maria D. Harper.

Eight orthopedic surgeons hold two clinics each month. Clinics are well attended and have a register of 3,986, which is an increase over last year. Patients are treated by orthopedic surgeons so far as the limited funds will permit. There is an accumulation of patients who need plastic surgery since Dr. W. G. Hamm enlisted in the military service, and is no longer available for this type of work.

GEORGIA STATE MEDICAL SOCIETY—LIAISON (NEGRO): Dr. M. T. Harrison, Atlanta, chairman, submitted a petition drawn by the Georgia State Medical Society to the State Board of Regents, as follows:

"Assuming that the State of Georgia is ready to make this further education available to the graduate Negro youth of the State, it is the thought of this committee that the subsidizing of prospective Negro medical students for attendance at the schools outside the State where there are provisions for them and no local deterrents exist, is at the present time the most practical plan. If equableness is desired, as stated in the petition, then such subsidy would be limited to that amount which the State adds to its white students' tuition to pay for their education."

COMMITTEE ON MEDICAL PREPAREDNESS: Dr. W. A. Selman, Atlanta, chairman, stated in his report that the Committee on Procurement and Assignment Service for Physicians, Dentists and Veterinarians had met twice each week throughout the year. The committee has had loyal help by the county committees, and the fullest cooperation from the Fourth Service Command. The Central Committee in Washington, D. C., has been most helpful, and approved the action of the State committee in most every instance.

Through patriotism of the Georgia doctors, this State leads many others in supplying its quota for the government services.

Young doctors who are physically disqualified are given an excellent opportunity to render patriotic service by relocating in some section where more medical service is needed.

MEMBERS STATE BOARD OF HEALTH: Since the names of two physicians from the Fourth District have been nominated by the Fourth District Medical Society, either of them eligible for appointment to the State Board of Health, and to prevent any misunderstanding, the Medical Association of Georgia hereby nominates all members of the Fourth District Medical Society, either of whom may be appointed a member of the State Board of Health.

MEDICAL DEFENSE: Dr. Marion C. Pruitt, Atlanta, chairman, submitted his report which showed that conditions and procedures have been greatly improved. To maintain this record all physicians should be careful not to make disparaging remarks against any of their fellow practitioners.

STUDENT LOAN FUND—WOMAN'S AUXILIARY: Mrs. H. G. Banister, Ma, Chairman, reported on the amount of funds loaned and cash in the bank, \$2,222.61, and War Bonds Series F \$740.00.

POST-GRADUATE STUDY: The committee submitted a report and stated that the most important reason for giving post-graduate courses was for the benefit of practicing physicians, physicians who wanted to obtain information in certain fields of medicine and surgery. The necessity of bringing medical care to every individual, with education of the public. Cooperation between the doctors and public—since education cannot be carried out through medical journals, there must be personal contact. Hospitals are natural places for medical centers. Post-graduate courses cannot be successfully maintained until after the present emergency is terminated.

MATERNAL MORTALITY AND INFANT DEATHS: Dr. H. F. Sharpley, Jr., Savannah, chairman, reported that with an increase of 10,000 births during 1943 there had actually been a decrease in the mortality rates. We should not be too optimistic about the decrease, as birth rates could decrease and the mortality rates increase. The factors involved are prenatal care, postnatal care, the attendant, unattended delivery, place of delivery, changing the place of delivery, time of delivery, juvenile delinquency, general disease, syphilis, pneumonia, embolism and finances.

ELEEMOSYNARY INSTITUTIONS: Dr. B. McH. Cline, Atlanta, introduced a resolution to prevent certain undue control of eleemosynary institutions in this State and to establish proper control from other sources (referred to the Committee on Public Policy and Legislation).

CRIMINALS CLAIMING INSANITY: Dr. D. N. Thompson, Elberton, urged some action by the General Assembly of Georgia to provide for the transfer of a criminally insane person to be admitted to the Milledgeville State Hospital immediately after he or she commits a crime and claims insanity as a defense. It should be the duty of the staff of the Milledgeville State Hospital to make all necessary examinations and submit their findings to the court of jurisdiction.

When a person is adjudged insane through the regular form of procedure of his home county, there should be no waiting period, but the person should be immediately

admitted to the State Hospital (referred to the Committee on Public Policy and Legislation).

PEDIATRICS: Dr. Wm. Willis Anderson, Atlanta, reported that the committee had met one time during the year, while the Georgia Pediatric Society met in Atlanta in December, 1943. Dr. Edwin Watson, State Department of Health, gave a detailed report on activities with which the pediatricians are concerned. While more children are being cared for in night nurseries than ever before while their mothers are in war jobs, the practice is condoned under the exigencies of the times, so long as the State Department of Public Health attempts to supervise the care of the infants.

The medical care given soldiers' wives and children has occupied a large amount of the time of various health organizations. This plan has been approved so long as the wives and children of soldiers up to a certain rank receive medical care from members of the Medical Association of Georgia at a nominal cost. At times when the children of soldiers are unable to obtain medical care from the doctors in armed services, the Red Cross has acted as a go-between for sick children and pediatricians.

Child health centers have flourished over the State and have examined and immunized children before being admitted to school.

SECURITIES: The Council and House of Delegates approved a motion to authorize the Secretary-Treasurer to invest \$10,000.00 in United States Government bonds.

BUDGET: The Council and House of Delegates approved the budget for the ensuing year.

DUES: Resolved that the House of Delegates set the amount of dues at \$7.00 per capita for the year 1945.

POSTWAR PROBLEMS

Industry must "retool its thinking" to provide useful jobs for the American wounded who return from this war, Dr. Thomas S. Parran, Surgeon General of the United States Public Health Service, asserted in a nationwide broadcast.

Dr. Parran, recalling that Maj. Gen. Norman T. Kirk, Army Surgeon General, has said that among every 100 men who are wounded in battle and reach a hospital, 97 will live, said that Americans have "a special responsibility to these men we love who come back with permanent handicaps."

"Blood plasma, the sulfa drugs and penicillin, in addition to other medical discoveries since the last war, are saving a large proportion of the most seriously injured men," he said in a broadcast of "The Doctor

Fights," a CBS program of June 13.

"Our doctors have preserved their lives," Dr. Parran said. "It is for us to see that they live in liberty and the pursuit of happiness."

Such men, he said, "will ask of us — and they will have every right to ask it — useful work which they are mentally and physically able to do."

"Industry, however," he continued, "needs to retool its thinking before retooling its machinery for postwar production. In the past men have been ruled by the needs of the machine. After the war, tools, machines and national planning must be fitted to the men who fought to preserve the nation."

"There is another thing to consider: Many of our fighting men have learned new skills. So far as is humanly possible, they should go on from there. Men who have learned the intricacies of radar will not be satisfied peddling magazine subscriptions. Men who have flown bombers will not be happy untangling red tape. Men who have learned to build and use the lighting calculators used in anti-aircraft fire will not accept with grace a job pushing buttons on an electric elevator."

Anticipating a "different" world after the war, Dr. Parran declared that "we must adapt a rich and vigorous part of that changed world for the participation of those men who have returned and will in increasing numbers return from the battlefronts, broken of body but high of heart until or unless they are set aside because we asked them to die for us but had planned no further."

What is believed to be the first reported case of the injection of penicillin directly into the brain as an adjunct to injecting it into the spinal column for the treatment of meningitis is reported in *The Journal of the American Medical Association* for July 8 by Captain William S. McCune and Captain Jack M. Evans, Medical Corps, A. U. S. This case of staphylococcal meningitis is presented, they say, chiefly to show that injection into a ventricle or cavity of the brain as an adjunct to the spinal column route of administration is possible without untoward reactions and with good effect. Introduction of a needle into the ventricle in the acute stage of meningitis, they warn, should be performed with caution, and not until penicillin has been given intraspinally for several days.

THE PRESIDENT'S PAGE

ABOUT OURSELVES

It is possible that our medical organization has become so commonplace with us, and we have taken it for granted so long, that we have become unfamiliar with some things about it. It may be profitable to review and get our bearings anew.

As the unit of our democracy is the family, then the community, then the state and then the nation; so the unit of organized medicine is the individual doctors who comprise the county medical society. The county medical societies unite to form the State Medical Association; and the state medical associations in turn compose the American Medical Association. The county medical societies elect delegates to the State Medical Association and the State Medical Association elects delegates to the A. M. A. These delegates from every state comprise the House of Delegates of the A. M. A.

At the recent annual meeting of the House of Delegates of the A. M. A., there was President James E. Paullin in the chair, superlatively informed, self-contained, efficient, gracious; and having done an extraordinary amount of work, was not the least puffed up. Will Mulherin, Allen Bunce, Olin Weaver, Charlie Roberts and Edgar D. Shanks were on time, sat up front and took an active part in the work of the House (I had great pride in them). That the delegates took their work seriously is indicated by the fact that out of a total of 175, 159 answered the first roll call and 10 more came in in time to be counted present (can you beat that?); and the first session began early and ran on without intermission until 3:30 P.M. The sessions began promptly, moved with dispatch, were entirely democratic, any matter not thoroughly considered was sent back for further study, only the patients' interests were considered, and the amount of work accomplished was stupendous.

The scientific assembly, scientific exhibit and technical exhibits appeared better than usual; and the total registration was 7,284.

If the A. M. A. is us, how much are we

Georgia doctors the A. M. A.? There are 2,814 doctors in the State, 2,014 of whom belong to the Medical Association of Georgia. Membership in the A. M. A. is automatic by virtue of being a member of a county and state medical organization. Fellowship in the A. M. A. is by application and the payment of \$8.00 annual dues, which includes *The Journal*.

There are only 815 fellows of the A. M. A. in Georgia as of April 1, 1944. It is desirable that the other 1,199 members become fellows of the A. M. A. Possibly this is largely an oversight, and it behooves everyone not a fellow to write immediately for a blank and become fully affiliated with organized medicine. Don't "let George do it," for you will enjoy helping carry on this work, too.

There are 800 doctors in Georgia not members of any medical society; most of these should be in, and this is work for the county secretaries and the councilors. Anybody can get the easy ones but it takes ability and work to get the difficult ones—no doctor in Georgia wants folks to think he couldn't belong to a county medical society.

The Journal of the A. M. A. is the world's leading medical publication and is the official mouthpiece of organized medicine in America. As of January 1, 741 fellows and 631 subscribers, a total of 1,372 doctors in Georgia, were receiving *The Journal*. It is a professional tragedy that 1,442 doctors in Georgia do not receive it—this is 51 per cent of us. Is it any wonder Wagner and Murray and Dingell, and the Children's Bureau, think we need their help in giving medical care to the people of Georgia? Not even the specialists can afford to be without *The Journal*. Its content, by itself, is sufficient to keep one abreast of modern medicine. Let us have every eligible doctor in Georgia a member of a county medical society and a fellow of the A. M. A., reading *The Journal* and up-to-date in every respect.

CLEVELAND THOMPSON, M.D.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

JULY, 1944

"SUMMER COMPLAINT"

Recently published is an excellent and needed resumé of the advance in diagnosis, therapy and control of the so-called diarrheal diseases.¹ Bacillary dysentery is particularly common in Georgia throughout the spring, summer and fall. The total discovered prevalence was 3 per cent as against 0.1 per cent in New York City. It was learned that, contrary to belief, bacillary dysentery due to *Shigella* was not uncommon in children or adults. Many of the cases of endemic diarrhea — particularly severe diarrhea — were due to *Shigella* infection, in both adults and children. Also indicted was the *Salmonella* group.

Hardy and Watt stress that the diagnosis of epidemic diarrhea is commonly a joint responsibility of the health officer and the practitioner.¹ In Georgia, the practitioner is fortunate in that he may avail himself of the facilities of the laboratories of the State Health Department. The laboratory reports may be used as a basis for the diagnosis and control of therapy, and carrier state. Hardy and Watt recommended fecal smears obtained by rectal swabs for immediate inoculation as a speedier method for determining the etiologic agent and identifying carriers. This is not always practical in outlying districts, so standard stool culture media are available on request.

It is interesting that the passive carrier state was found to be common. In household groups of the poorer classes, fecal specimens obtained from 219 members, in the presence of an acute dysentery, 40 (18 per cent) were found to be passive carriers. Eighty per cent of the convalescents in one group were carriers over an average of 34 days, as against 11 days of illness. Ten per cent of this group were carriers after 10

weeks.¹ This stresses the need of rechecking the cultures before release to prevent spread of the disease, which is at best inconvenient to adults, and very severely incapacitating and often fatal to infants and children.

Chemotherapy has a major place in the treatment of bacillary dysentery. There are available two types of sulfonamides for therapy: those poorly absorbed, locally acting, such as sulfaguanidine and succinyl sulfathiazole; and the more highly absorbed varieties such as thiazole or merazine. Hardy and Watt use both and give five times larger doses of the poorly absorbed group than of the rapidly absorbed group (adult dose of sulfonamides is 1 gram 3 or 4 times a day). Medication is discontinued after two consecutive cultures are negative. On the basis of observation, they suggest a minimum of 4 days treatment for any type, and 10 days for the Sonne type. In all clinical cases treatment is continued for 2 days following the cessation of symptoms.¹ It might be suggested that in localities where blood counts cannot be done and where patients cannot for good reason be under constant observation, a compromise in prescribing the drugs should be made. One-third to one-half of the usual total calculated dose of the circulating type of sulfonamide may be supplied, in combination with sulfaguanidine or succinyl thiazole in complementary proportion, in an attempt to avoid the toxic reactions which might easily be induced and go unrecognized, particularly if the drugs are to be continued for 2 days past time of all symptoms.

HELEN W. BELLHOUSE, M.D.

Pulmonary tuberculosis is present in a significant proportion of adult patients admitted to general hospitals and remains undetected during the hospital stay unless all patients receive routinely a chest x-ray examination. Such unrecognized tuberculosis is a hazard not only to the patients themselves but also to the hospital employees who may be exposed to it. One of the measures essential to the solution of this problem is routine chest x-ray examination of employees.

1. Hardy, A. V., and Watt, James: *The Acute Diarrheal Diseases*, J. A. M. A. 124: 1173-1179 (April 22) 1944.

MEDICAL EDUCATION

Dr. James E. Paullin, retiring president of the American Medical Association, warned on June 6, 1944, against "an alarming situation" in medicine, seriously threatening the public health, because so many doctors are in the armed forces and it is difficult to obtain draft deferments for pre-medical students.

In a nationwide CBS radio broadcast during the program, "The Doctor Fights," Dr. Paullin asserted that "so hazardous is this situation as it relates to the health and welfare of the American people that several special committees of the American Medical Association are working seriously on this problem right now."

He pointed out that, in age groups over 45, "there are now more deaths among doctors than statistics would lead us to expect — simply because of the excessive strain placed upon these doctors by today's difficult times."

"Today with more than 60,000 doctors in the armed forces and with the Army and Navy taking more than half of the new graduates each year, an alarming situation has developed which in the future may seriously threaten the public health," he said.

"About 2,600 doctors are entering the armed services annually. There is an annual deficit each year of at least 2,200 doctors, because the vacancies created in medical ranks by death or forced retirement from practice because of age or illness cannot be filled. The reason for this lies in the difficulty of deferring premedical students, and in keeping our classes filled with otherwise draft-exempt men or with women."

He expressed gratification at the discovery in recent years of such drugs as penicillin and the sulfonamides, which, he said, "mean so much to the health and life of human beings that every doctor longs to see them made available to any human being in need of them."

"The problems of medical care are fundamental to the reconstruction and rehabilitation of our nation in the postwar period,"

he said. "The medical profession of this nation is willing to take the lead in planning the evolutionary changes that are bound to occur."

Medicine's most important current problem, Dr. Paullin asserted, "is the maintenance of a constant flow of physicians from our medical schools to supply the civilian population and the armed forces now and in the postwar period."

"The education of a modern doctor," he explained, "requires a period of premedical education. Even when it is accelerated to the utmost, it takes a year and a half. Then comes medical education which, even when speeded to the greatest rate, requires two and one-half years additional. Besides every doctor must have, even in war-time, at least nine months of internship in a good hospital. In peace time this may be a year or even two years of additional training."

MEDICAL ASSOCIATION OF GEORGIA

Ninety-Sixth Annual Session

MACON

MAY 8, 9, 10, 11, 1945

OFFICERS AND COMMITTEES, 1944-1945

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Allen H. Bunce (1945-46).....	Atlanta
Alternate, H. C. Sauls.....	Atlanta
Olin H. Weaver (1944-45).....	Macon
Alternate, C. K. Sharp.....	Arlington

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Marion C. Pruitt, Clerk.....	Atlanta

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8. W. F. Reavis (1946).....	Waycross
9. C. B. Lord (1947).....	Jefferson
10. Harry L. Cheves (1947).....	Union Point

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6. H. G. Weaver (1946)	Macon
7. D. Lloyd Wood (1946)	Dalton
8. Alton M. Johnson (1946)	Valdosta
9. D. H. Garrison (1947)	Clarksville
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Cleveland Thompson, President	Millen
Steve P. Kenyon, Chairman, Council	Dawson
Edgar D. Shanks, Secretary-Treasurer	Atlanta

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of the

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Edgar D. Shanks, Secretary-Treasurer	Atlanta
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Allen H. Bunce (1949)	Atlanta
Hal M. Davison (1949)	Atlanta

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Ruskin King	Savannah

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W. A. Mulherin	Augusta
J. C. Patterson	Cuthbert
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Enoch Callaway	LaGrange
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C. C. Harrold	Macon
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*Executive Committee, Women's Field Army of the
American Society for the Control of Cancer*

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J. Z. McDaniel	Augusta
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Willis P. Jordan	Columbus
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Harry Righton	Savannah
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L. P. Pierce	Waycross
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H. C. Schenck	Atlanta
C. D. Whelchel	Gainesville
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R. C. McGahee	Augusta
E. F. Wahl	Thomasville
R. V. Martin	Savannah
C. M. Sharp	Alto
H. C. Atkinson	Macon
Warren Gilbert	Rome
Lucius N. Todd	Augusta
R. C. Major	Augusta

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Jos. C. Massee, Co-Chairman	Atlanta
J. E. Scarborough, Co-Chairman	Emory University
Robert Drane	Savannah
Lee Howard	Savannah
B. E. Collins	Waycross
Joseph Yampolsky	Atlanta
Wm. F. Lake	Atlanta
Edgar R. Pund	Augusta
John E. Walker	Columbus
Helen W. Bellhouse	Thomasville
R. N. Johnson	Rome
W. S. Cook	Albany
J. H. Kite	Atlanta
Max Mass	Macon

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C. Thompson.....	Millen
O. S. Cofer.....	Atlanta
W. T. Randolph.....	Winder
G. G. Lunsford.....	Atlanta
C. D. Bowdoin.....	Atlanta
J. Lon King.....	Macon

Medical Preparedness

W. A. Selman, Chairman.....	Atlanta
Jno. B. Fitts.....	Atlanta
Edgar D. Shanks.....	Atlanta

Post-Graduate Study

G. Lombard Kelly, Chairman.....	Augusta
R. H. Oppenheimer.....	Emory University
Richard Torpin.....	Augusta
Olin S. Cofer.....	Atlanta
H. C. Sauls.....	Atlanta
W. F. Reavis.....	Waycross
S. P. Kenyon.....	Dawson
R. D. McKenzie.....	Alhany

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R. C. Maddox.....	Rome
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H. H. Allen.....	Decatur

Pediatrics

W. W. Anderson, Chairman.....	Atlanta
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Fred F. Rudder.....	Atlanta
F. B. Rawlings.....	Sandersville
B. Lester Harbin.....	Rome
Kenneth McCullough.....	Waycross
R. L. Rogers.....	Gainesville
S. D. Brown.....	Royston
Enoch Callaway.....	LaGrange
W. M. Feild.....	Albany
S. E. Sanchez.....	Barwick

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T. S. Gatewood.....	Americus
M. M. McCord.....	Rome
Ralph H. Chaney.....	Augusta
W. F. Reavis.....	Waycross
T. C. Williams.....	Valdosta
G. G. Lunsford.....	Atlanta
J. M. Byne, Jr.....	Waynesboro

Maternal Mortality and Infant Deaths

H. F. Sharpley, Jr., Chairman.....	Savannah
C. B. Upshaw.....	Atlanta
Richard Torpin.....	Augusta

I. M. Lucas.....	Albany
David M. Wolfe.....	Atlanta
O. R. Thompson.....	Macon
W. C. Goodpasture.....	Atlanta

Fraternal Delegates to Other State Meetings

Alabama: D. S. Reese, Carrollton; Mercer Blanchard, Columbus; R. F. Wheat, Bainbridge.
 Florida: Wm. W. Anderson, Atlanta; Grady N. Coker, Canton; Hal M. Davison, Atlanta.
 North Carolina: Allen H. Bunce, Atlanta, and Ralph M. Goss, Athens.
 South Carolina: G. Lombard Kelley, Augusta; Stewart D. Brown, Royston, and J. M. Byne, Jr., Waynesboro.
 Tennessee: J. T. McCall, Rome, and Trammell Starr, Dalton.

*State Board of Health**

First District: James M. Byne, Jr., Waynesboro, Sept. 1, 1945.
 Second District: C. K. Sharp, Arlington, Sept. 1, 1945.
 Third District: Mr. R. C. Ellis, Americus, Sept. 1, 1948.
 Fourth District: J. A. Corry, Barnesville, Sept. 1, 1949.
 Fifth District: Mr. Robert F. Maddox, Sept. 1, 1948.
 Sixth District: C. L. Ridley, Macon, Sept. 1, 1944.
 Seventh District: W. P. Harbin, Jr., Rome, Sept. 1, 1944.
 Eighth District: Henry W. Clements, Adel, Sept. 1, 1944.
 Ninth District: Robert L. Rogers, Gainesville, Sept. 1, 1945.
 Tenth District: D. N. Thompson, Elberton, Sept. 1, 1948.

STATE OF GEORGIA AT LARGE†

Georgia Dental Association

W. K. White, Savannah, Sept. 1, 1945.
 J. G. Williams, Atlanta, Sept. 1, 1945.

Georgia Pharmaceutical Association

M. D. Hodges, Marietta, Sept. 1, 1941.
 John W. White, Thomasville, Sept. 1, 1947.

*Nominated by their respective district medical societies and appointed for six year terms.

†Nominated by their respective associations.

STATE BOARD OF MEDICAL EXAMINERS

L. G. Neal.....	Cleveland
J. I. Matthews.....	Dallas
R. F. Wheat.....	Bainbridge
Murdock Eguen.....	Atlanta
Steve P. Kenyon.....	Dawson
Harold P. McDonald.....	Atlanta
J. W. Palmer.....	Ailey
T. H. Clark.....	Douglas
Rufus A. A-skew.....	Atlanta
Grady N. Coker.....	Canton

THE PHYSICIAN'S BOOKSHELF

Metastases, a book of more than 200 pages but concise in every respect, by Malford W. Thewlis, M.D., Attending Specialist, General Medicine, U. S. Public Health Hospitals, New York City, with foreword by Hubert A. Royster, M.D., Raleigh, N. C. Publisher Charlotte Press, Charlotte, N. C. Price \$5. This book will be found a valuable asset for the physician's bookshelf, and will be most useful to the medical student as well.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

SYPHILIS CASES: MANAGEMENT AND MISMANAGEMENT

One need not be an expert syphilologist to successfully treat the average case of syphilis. The problem presented is usually not a complex one, but certain clear cut principles must be understood. Conceivably a brief discussion of these tenets might be of value to the practitioner.

DIAGNOSIS

The first requirement is the realization that the diagnosis of syphilis is based mainly on laboratory findings. This is not saying that the laboratory makes the diagnosis; the physician diagnoses his patient after consideration of all available data. Of such data, laboratory findings are by far the most important. This can best be shown by considering syphilis in its various stages.

Primary Stage (Chancere).—No clinician can consistently differentiate the initial lesion of syphilis from chancroid or other local lesions by clinical examination. It is true that the chancre and chancroid usually differ as to appearance and symptoms presented; the well developed case of granuloma inguinale is quite characteristic; the initial lesion of lymphogranuloma venereum is minimal and superficial and, more often than not, is overlooked. But classic lesions answering textbook descriptions are all too uncommon. Furthermore, mixed infections occur rather frequently. The intraurethral chancre must not be overlooked.

The positive darkfield examination, then, provides the only conclusive diagnosis of primary syphilis. Darkfield* and blood test specimens should be taken when the patient is first seen. It must be remembered that the blood test does not unusually become positive until ten days after the appearance of the chancre.

A positive darkfield, or one positive blood test in the presence of a suggestive local lesion, justifies a diagnosis of syphilis and the immediate institution of treatment.

Negative darkfields should be repeated daily and no antiseptics should be applied to the lesion. If positive darkfield cannot be obtained do weekly follow-up blood tests in order to make as early a diagnosis as possible.

Treatment begun during the darkfield positive, blood test negative primary stage offers by far the best chance of cure.

But do not treat syphilis on suspicion.

Secondary Stage (Rash, mucous patches, sore throat, alopecia, adenopathy, malaise).—During this stage one may, for all practical purposes,

say that the blood test is 100 per cent positive. Negative bloods should, however, be repeated.

A persistently negative blood in an untreated case in the presence of a body rash indicates that the rash is non-syphilitic. A positive blood does not, however, prove that a rash is syphilitic. The patient with latent syphilis is heir to the same skin diseases that others may have.

Latent Stage.—Here no clinical evidence is seen and the blood test is the only means of diagnosis. Most cases of syphilis are in latency most of the time. Unless routine blood tests are done many cases will be missed.

Two positive bloods taken at least a week apart are necessary for a diagnosis of syphilis in the absence of symptoms.

A diagnosis of latent syphilis implies that the spinal fluid has been examined and found to be negative.

Late Stage (Symptomatic).—Late syphilis usually manifests itself as involving one or more of six systems: skin and mucous membranes, skeletal system, liver, eye, cardiovascular, or central nervous system. The blood test is usually positive but may be negative in the presence of syphilitic lesions. In this stage clinical symptoms may occasionally be considered more significant than negative laboratory findings and therapeutic test may be justified.

Spinal fluid examination should be performed at the outset on all late cases. *A negative blood test does not preclude a positive spinal fluid.*

If a case of syphilis of four years or longer duration, treated or untreated, shows a negative spinal fluid, one need seldom fear that the spinal fluid will become positive at a later date.

TREATMENT

Proper syphilis case management requires, first of all, a realization that the management of early syphilis (less than four years' duration) and the management of late syphilis are two quite different procedures.

This difference is brought about by the patient's own immunologic response, the production of "reagin" in the blood, supposedly as a defense mechanism. The serologic blood test is based on the presence or absence of this substance in the blood.

To remind the practitioner that the blood test for syphilis is not a test involving the identification of the infecting organism may seem uncalled for. Yet the tenacity with which the average practitioner clings to the idea that the blood test may be used as a dependable criterion of cure suggests the advisability of such a reminder.

The same physician who understands that the persistence of a positive agglutination test after recovery from typhoid or typhus fever is due

*Capillary tube outfits for collection of darkfield specimens and shipping are provided free by the State Health Department.

simply to continuing immunity, and not to remaining infection, will often fail to realize that the syphilitic may often be "cured" although his blood test is still positive.

Early Syphilis.—In very early cases (primary and secondary) the patient's immunological balance has not been set up and "reagin" has not been firmly established, so to speak, in the blood.

Consequently, with prompt treatment, continued regularly, we expect a reversal of a positive blood test within at least six months. Using the orthodox weekly injection method treatment should be continued for a year after reversal of the blood test. Space does not permit discussion of rapid treatment methods.

If the blood test is still positive at the end of six months spinal fluid examination is imperative. A positive fluid at this time calls for prolonged routine therapy. Failure of spinal fluid findings to improve under such measures indicates use of tryparsamide or fever therapy.

Regularity of treatment in early syphilis is essential. Otherwise multiplication and redistribution of spirochetes with resulting infectious relapse is likely to occur. Thus the blood test may be taken as a guide in treatment of primary and secondary syphilis and, to a less degree, in early latent syphilis (less than four years' duration).

Infectious relapse occurs in inverse proportion to the amount of arsenic the patient has received.

Treatment should be started with a course of at least twelve arsenical injections. Dosage is based on body weight and not on sex. This is followed by a course of six to eight bismuth injections. Alternate courses of arsenic and bismuth follow. Ten injections to each course is a good arbitrary number. A total of 60 to 70 injections usually provides an adequate treatment.

Treatment should always end with a course of bismuth.

No case should be dismissed without spinal fluid examination.

Late Latent Syphilis.—This is never an emergency. Immunologic balance is established. Reversal of the blood test is the least of our objectives in treatment and probably will not occur. Spinal fluid examination should be done at the outset. (A diagnosis of latency cannot be made unless it is shown that the spinal fluid is normal.)

These patients do not need long courses of treatment. A total of 20 arsenic and 20 bismuth seems to do as much for the patient as longer routines of therapy.

Treatment should always be started with bismuth to avoid the possibility of the dangerous Herxheimer reaction (this need not be feared in early syphilis).

Alternate courses of 10 bismuth and 10 arsenic injections, given weekly, should be given for a

total of 40 to 60 injections. Treatment should end with bismuth.

It is a mistake to treat cases of late syphilis indefinitely because of a persistently positive blood test. Sero-resistance in such cases is of no significance if the patient has had a full course of treatment, shows no evidence of syphilis upon careful examination, and the spinal fluid is normal.

Late Benign Syphilis (skin or mucous membranes, skeletal, liver, eye).—Begin treatment with bismuth except in case of iritis (iritis does not respond to bismuth therapy and arsenic should be used at the start in spite of the possibility of a Herxheimer reaction).

Alternating courses of 8 bismuth injections and 8 arsenic injections (weekly) are carried out for 32 injections. Following this the bismuth course is raised to 10 injections and the arsenic course reduced to 6 injections. After two years treatment a rest period of three months is given followed by 12 bismuth injections.

Advanced age, coincident disease or other contraindications may require use of a more conservative treatment such as short courses of iodides by mouth and bismuth injections.

Here again seroresistance is, in itself, of relatively little significance. The seroresistant case cannot be intelligently handled without a knowledge of the condition of the spinal fluid.

Cardiovascular Syphilis and Neurosyphilis.—An adequate discussion of the management of these special types of syphilis will not be attempted here. A few warnings are given.

In cardiovascular syphilis all evidence of decompensation must be relieved by usual methods before giving antisyphilitic therapy. *Arsenic has no place in the treatment of this condition.* Heavy metals only should be used. Only prolongation of life for a few years is to be expected in true cardiovascular syphilis.

Asymptomatic neurosyphilis (abnormal spinal fluid in absence of clinical signs or symptoms) may be successfully handled by the practitioner after consultation. The same may be said for meningovascular neurosyphilis. Tahes and paresis cases should be treated by the expert. Repeated spinal fluid study is essential in management of neurosyphilis.

Appropriate consultation with the syphilologist, internist, neurologist, psychiatrist or oculist is advisable in the management of both cardiovascular and neurosyphilis.

JOHN M. WALTON, M.D.

State Venereal Disease Control Officer.

The Leslie Dana Gold Medal, awarded annually for outstanding achievements in the prevention of blindness and the conservation of vision, will be presented this year to Miss Linda Neville of Lexington, Ky.

WOMAN'S AUXILIARY : OFFICERS 1944-45

President—Mrs. W. T. Randolph, Winder.

President-Elect—Mrs. Lucius N. Todd, R. F. D. No. 2, Augusta.

First Vice-President—Mrs. Edgar H. Greene, 1442 Wesley Road, Atlanta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Leonard Massengale, Lumpkin.

Recording Secretary—Mrs. Charles Usher, 6 East Liberty St., Savannah.

Corresponding Secretary—Mrs. Alex Russell, Winder.

Treasurer—Mrs. Ralph Fowler, Marietta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. Charles Daniel, College Park.

PRESIDENT'S REPORT

MRS. OLIN S. COFER
Atlanta

*Mr. President and Members of the
House of Delegates:*

The Woman's Auxiliary to the Medical Association of Georgia is completing at this convention its twentieth year of organization. Together we have moved forward in auxiliary work and in those services made necessary by the disturbing elements of war.

The reports from county presidents, which reflect the suggested program "Health for Defense," indicate unusual interest and accomplishments in auxiliary work.

Three meetings of the Executive Board have been held during the year—to plan the year's program and to recommend its use by county units. The program as adopted was approved by the Advisory Committee in a joint meeting with the members of the State Auxiliary.

A decrease in membership, due to the departure of many doctors and their wives to other fields of war service, was naturally expected. We are happy to report that the present enrollment numbers 561. Three county auxiliaries have disbanded during the year: Lamar, Stephens and Sumter; but two new ones were added: Glynn and Polk. Six members-at-large from Bainbridge were enrolled.

It was my privilege to attend five of the district meetings. My only regret is, that due to the gasoline rationing, I have not been able to visit all of the district and county auxiliaries.

As president, I wish to present a brief summary of the reports of state officers and chairmen, from May 1, 1943, to May 1, 1944.

ORGANIZATION: (President-Elect, Mrs. W. T. Randolph). Of the ten districts in the State all are organized but one, and in this district there is a large and very active county auxiliary. There are 26 active auxiliaries, comprising 32 counties. Near camp areas, auxiliaries welcome the wives of doctors who are in service, and every effort is made to keep these women interested in auxiliary work. Three auxiliaries pay dues of wives

of men in service.

HEALTH EDUCATION: (First Vice-President Mrs. Ralph Fowler). Health education is the primary factor of the Medical Auxiliary. The program adopted for the year stressed the following subjects: Nutrition, Cancer, Tuberculosis, Venereal Diseases, and a Youth and Child Guidance program.

VISUAL EDUCATION: (Mrs. Fred Rawlings, Chairman). This is a sub-committee under the Health Education Committee. Equipment for the showing of health films in each district has been purchased by the Medical Association of Georgia. A splendid library of films in the Department of Health (Atlanta) is available to county auxiliaries. Gasoline rationing has prevented the showing of as many films as in previous years.

Hours

46 Health programs given to such groups as P.-T.A.'s, Clubs, Schools, etc.—to 3,862 persons	6,068
48 Radio programs	12
46 Health films—shown to 2,302 persons	381
9 Members on Speakers' Bureau	248
9 Members on Speakers' Bureau, addressed 2,500 persons	248
Subjects discussed: Nutrition, Tuberculosis, Cancer and Venereal Diseases.	
Health Education Exhibits maintained (Fulton County).	
Leaflets on health subjects distributed—32,320.	
Total Hours	9,948

HYGEIA: (Second Vice-President, Mrs. L. W. Williams). The chairman reported 236 subscriptions to *Hygeia*. Many of these have been placed in libraries, schools (white and Negro), Army recreational centers, doctors' and dentists' offices.

SCRAPBOOK: (Third Vice-President, Mrs. Richard Binion). Clippings of all Auxiliary press notices have been mounted in a scrapbook, together with pictures and items of auxiliary interest.

HISTORIAN: (Mrs. W. W. Puett). Ten county histories for the current year have been filed with the historian. Auxiliary members have taken the lead in their various communities in health education and wartime services.

PUBLIC RELATIONS: (Mrs. Wallace Bazemore,

Chairman). Despite the many changes due to war conditions, the public relations program has gone forward. Auxiliary members have participated in all branches of war activities and have promoted health education programs among Parent-Teacher groups, women's clubs, and the like, stressing particularly the importance of nutrition classes. Emphasis was placed on all forms of war services and cooperation with such lay groups as Red Cross, Office of Civilian Defense, American Women's Volunteer Services, Woman's Field Army for Cancer Control, Tuberculosis Association and Social Hygiene Council.

Attention was called to the A. M. A. radio programs each Saturday afternoon on "Doctors at War."

Fulton County, as well as other county auxiliaries, has done outstanding war work. The Doctors' Aide Corps has received nation-wide recognition. The Blood Type Registries, under the able direction of Mrs. John Funke, has typed 9,238 persons this year—2,278 for the U. S. Navy at Emory University and Tech; 18,869 typed since Dec. 7, 1942. Appointments are made at the Blood Donor Center for those willing to give blood.

Mrs. James N. Brawner, Sr., assisted in organizing a Doctors' Aide Corps in Jefferson County, Alabama (Birmingham, Ala.).

Mrs. E. H. Greene helped to organize a Blood Type Registry in Winston-Salem, N. C.

STUDENT LOAN FUND: (Mrs. H. G. Banister, Chairman). Due to the U. S. Government supporting the medical and nursing schools, contributions to the Student Loan Fund have diminished. In order to keep alive the fund, small donations have been made to the amount of \$154.50.

RESEARCH IN THE ROMANCE OF MEDICINE: (Mrs. Cleveland Thompson, Chairman). Three splendid articles were contributed to the library of "Research and Romance of Medicine." A biography of Dr. Lucius Lamar; articles on blood plasma, *Life by Remote Control*; *Public Health Protection in USSR*, and an account of activities of Russian women were added.

LEGISLATIVE COMMITTEE: (Mrs. J. C. Blalock, Chairman). Information on the Wagner-Murray-Dingell bill has been disseminated and efforts exerted through the 26 county auxiliaries to defeat it. Other legislative measures concerning the practice of medicine have been studied.

JANE TODD CRAWFORD MEMORIAL COMMITTEE: (Mrs. W. Claude Mitchell, Chairman). Six county auxiliaries have had programs based on the life of Jane Todd Crawford and the first abdominal operation for ovarian tumor, performed by Dr. Ephriam McDowell, a pioneer physician of Kentucky.

DOCTOR' DAY OBSERVANCE: (Mrs. Leonard Massengale, Chairman). County auxiliaries celebrated Doctors' Day March 30th, with tributes of flowers, booklets, poems, radio talks,

dinners, notes, cards, and letters to doctors at home and in the armed forces. One auxiliary sent red carnations to every doctor in their county society. The state chairman compiled a pamphlet, "Information About Doctors' Day." This gave a brief history of the day and suggestions for its observance.

EXHIBITS AND AWARDS COMMITTEE: (Mrs. E. N. Gleaton, Chairman). Last year the *Mrs. J. Bonar White Award* for the most outstanding exhibit of the state convention went to the Fulton County Auxiliary. The Scrapbook Award was won by the Randolph-Terrell Auxiliary. These awards will be presented again this year.

The Mrs. James N. Brawner Trophy (Mrs. J. Lon King, Chairman).

This award was won for the third year in succession by the Baldwin County Auxiliary. It is given to the organization best carrying out the prescribed program of work.

PRESS AND PUBLICITY: (Mrs. J. Harry Rogers, Chairman). Publicity has been given to the work of the Auxiliary each month in the State Medical Journal; in local newspapers, and in the *Atlanta Constitution* on the first Sunday of each month. District and county auxiliaries have contributed items of news to the MEDICAL JOURNAL and through its pages state chairmen have been given the privilege of publishing their programs for the year.

WAR PARTICIPATION: (Mrs. James N. Brawner, Sr., Chairman). The importance and value of the war work done by auxiliary members cannot be estimated. From the 16 county auxiliaries reporting, the most outstanding services have been recorded:

A BRIEF SUMMARY OF WARTIME SERVICES

	Hours
28 Members assisted in war bond sales.....	1,158
24 Members assisted in cancer drive.....	2,063
46 Health programs given.....	6,068
48 Radio programs given.....	12
46 Health films to approximately 3,000.....	381
Total Health Education activities.....	9,948
32,320 Leaflets on health distributed	
32 Members served as directors and instructors in Red Cross.....	5,850
8 Members served in day nurseries.....	3,330
10 Members assisted in recruitment of nurses....	1,071
44 Served in canteens.....	7,047
Total Red Cross Activities (Staff Assistants, Nurses' Aides, Home Nursing, Motor Units, Gray Ladies, Blood Donor Center)	49,555
Total American Women's Volunteer Services (Salvage drives, day nurseries, entertaining in camps, Travelers' Aid, gifts to soldiers, furnishing recreation rooms).....	5,434
Total Production:	
Surgical dressings	28,293
Cancer bandages	2,013
Sewing and knitting.....	12,830
TOTAL HOURS OF WAR SERVICES.....	155,563

(Continued on page 236)

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lillie W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone Walnut 8911; residence, VERNON 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone Walnut 8911; residence, Jackson 7979.



PHOTOS, LEFT TO RIGHT, ARE

Mrs. James N. Brawner, Sr., Co-Chairman, Recruitment Committee, State Nursing Council for War Service.

Carolyn Adkins, Chairman, Fifth District Nursing Council for War Service.

Jessie M. Candlish, Vice-Chairman, Recruitment Committee, State Nursing Council for War Service.

Mrs. Gordon S. Carrigan, Jr., Recruiting Officer, Recruitment Committee, State Nursing Council for War Service.

Julia Miriani, Chairman, Recruitment Committee, State Nursing Council for War Service.

DISTRICT MANAGERS

First District—Mrs. Jennie Bouhan, 410 East Taylor St., Savannah.

Second District—Mrs. Jewell Cox Cumbie, Climax.

Third District—Mrs. Mae Luttrell Yawn, 2719 Tenth Avenue, Columbus.

Fourth District—Virginia Slappey, 27 West Washington

St., Newnan.

Fifth District—Carolyn Adkins, 2080 North Decatur Road, Atlanta.

Sixth District—Mrs. Ollie Bloodworth, 500 Beech Ave., Macon.

Seventh District—Edna McDaniel, Box 65, Cave Springs.

Eighth District—Geraldine Harvey (Acting), 901 Eads St., Waycross.

Ninth District—Margaret Currie, Box 508, Gainesville.

Tenth District—Mrs. Effie R. Akerman, 831 15th St., Augusta.

Eleventh District—Mrs. Warren Thurmond, 66 Prince Place, Athens.

Twelfth District—Mrs. Downey Flahive, Sumter County Health Department, Americus.

Thirteenth District—Mrs. A. B. Jones, Jr., Quitman.

Fourteenth District—Mrs. Alma Galbreath Hinson, Lyons.

ESTABLISHMENT OF STATE RECRUITMENT OFFICE FOR U. S. CADET NURSES

MRS. GORDON S. CARRIGAN, JR.

*Recruitment Officer, Recruitment Committee,
State Nursing Council for War Service,
Academy of Medicine, 875 West Peachtree,
St., N. E., Atlanta*

Feeling the necessity of having a Cadet Nurse Corps recruiting officer in the State of Georgia for the purpose of securing more enlistments, the Georgia State Nursing Council for War Service undertook to establish such an office in Atlanta.

With the cooperation of interested persons and the donation of office space by the Academy of Medicine at 875 West Peachtree Street, there

was opened an office for recruitment with Mrs. Gordon S. Carrigan, Jr., as recruitment officer. Long a members of the nursing profession, Mrs. Carrigan is well acquainted with the work and realizes the utmost necessity of securing every possible Cadet Nurse Corps applicant.

The national quota for Cadet Nurses being 65,000 each year, Mrs. Carrigan feels that it is the duty of the State of Georgia to do more than its allotted share. With the office not yet one month old, members of the staff are busily engaged in the processing of many applications already received. Not yet familiar with the new Atlanta address, many of the applicants have written to National Headquarters, U. S. Cadet Nurse Corps, Box 88, New York, N. Y. These applications have been forwarded to the Atlanta office for follow-up.

Mrs. James N. Brawner, Sr., a member of the Recruitment Committee of Georgia, represents the Woman's Auxiliary to the State Medical Association. In this capacity Mrs. Brawner is actively engaged in assisting Mrs. Carrigan in the recruitment for the State.

Aside from the organization financing the new office and the help given by the Fulton County Medical Society and the Woman's Auxiliary, there are numerous prominent representatives of state-wide civic, religious, and patriotic organizations who are giving generously of their time and efforts to assure that every possible applicant in Georgia be received for the corps. The district managers throughout the State stand ready to exert their every effort in the successful promotion of this program.

For local information on recruitment in your district, contact the following chairmen of District Nursing Councils for War Service:

MEMBERS REGISTERED AT THE NINETY-FIFTH ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF GEORGIA

Savannah, May 9, 10, 11, 12, 1944

A
Abercrombie, T. F., Atlanta
Aiken, W. W., Lyons
Alden, Herbert S., Atlanta
Alexander, Geo. H., Forsyth
Allen, C. H., Bremen
Allen, Eustace A., Atlanta
Allison, Gordon G., Atlanta
Anderson, Sam A., Milledgeville
Anderson, W. W., Atlanta
Ansley, H. G., Decatur
Aven, C. C., Atlanta
Ayers, Clarence L., Toccoa
B
Bancker, E. A., Atlanta
Bailey, W. V., Elberton
Baker, J. O., Savannah
Banister, H. G., Ila
Barton, W. L., Macon
Batts, A. S., Hawkinsville
Barrett, Clara B., Atlanta

Barrow, Craig, Savannah
Bazemore, Wallace L., Macon
Beasley, B. T., Atlanta
Bedingfield, W. O., Savannah
Bellhouse, Helen, Thomasville
Bell, Rudolph, Thomasville
Birdsong, H. W., Athens
Bishop, Everett L., Charleston, S. C.
Bivings, Lee, Atlanta
Boland, Frank K., Atlanta
Bowdoin, C. D., Atlanta
Bray, H. B., Wrightsville
Brewer, Richard, Atlanta
Brawner, Jas. N., Sr., Atlanta
Brittingham, John W., Augusta
Broadrick, G. L., Dalton
Brown, A. J., Camp Stewart, Ga.
Brown, C. T., Jr., Guyton
Brown, Stephen T., Atlanta
Brown, W. E., Savannah
Bunce, Allen H., Atlanta

Burpee, C. M., Augusta
Bussey, J. G., Austell
Byne, J. M., Waynesboro
Byram, James H., Atlanta
C
Campbell, J. L., Atlanta
Cathcart, Don F., Atlanta
Center, A. H., Fort Screven, Ga.
Chandler, J. H., Swainsboro
Cheek, O. H., Dublin
Cline, B. McH., Atlanta
Chaney, Ralph H., Augusta
Chisholm, Julian F., Savannah
Clifton, Ben H., Atlanta
Clark, James J., Atlanta
Coker, G. N., Canton
Cofor, Olin S., Atlanta
Cochran, M. F., Newnan
Claxton, E. B., Dublin
Coleman, Warren A., Eastman
Collier, T. W., Brunswick

Collins, Braswell E., Waycross
Compton, H. T., Savannah
Collins, J. J., Thomasville
Cook, W. S., Albany
Cooke, Virgil C., Atlanta
Cornett, D. M., Canton
Cousins, W. L., Atlanta
Crawford, H. C., Atlanta

D

Daniel, Chas. H., College Park
Daniel, J. W., Jr., Savannah
Davenport, T. F., Atlanta
Dancy, Wm. R., Savannah
Davis, Abe J., Augusta
Davis, C. L., Hinesville
Davis, W. T., Atlanta
Davis, Weyman, Athens
Davison, Hal M., Atlanta
Demmond, E. C., Savannah
Dimmock, Avary, Atlanta
Denney, Roy L., Alma
Denton, John F., Atlanta
Dobes, Wm. L., Atlanta
Drane, Robert T., Savannah
Dougherty, M. S., Charleston, S. C.

E

Edwards, D. B., Savannah
Egan, M. J., Savannah
Elliott, John L., Savannah
Elliott, W. G., Cuthbert
Engelking, Chas. F., Dalton
Equen, Murdock, Atlanta
Evans, Albert L., Atlanta
Evans, J. R., Decatur
Exley, Howard T., Savannah

F

Faggart, G. H., Savannah
Fancher, J. K., Atlanta
Farmer, C. H., Macon
Farror, J. H., Manchester
Ferguson, A. N., Augusta
Fincher, E. F., Atlanta
Findley, C. W., Vidalia
Fitts, John B., Atlanta
Flanagin, W. M., Waycross
Fletcher, S. Elizabeth, Statesboro
Florence, Loree, Athens
Floyd, C. S., Loganville
Floyd, Waldo E., Statesboro
Fountain, Jas. A., Macon
Fowler, Major F., Atlanta
Fowler, R. W., Marietta
Fulghum, Chas. B., Milledgeville
Fuller, Geo. W., Atlanta
Fulmer, Wm. H., Savannah
Funke, John, Atlanta
Funkhouser, W. L., Atlanta

G

Garrett, John A., Meigs
Garrison, D. H., Cornelia
Gallemore, J. L., Perry
Gay, J. Gaston, Atlanta
Giddings, Glennville, Atlanta
Gleaton, E. N., Savannah
Goldsmith, W. S., Stone Mountain
Goodwyn, T. P., Atlanta
Graham, Rufus E., Savannah
Green, Samuel, Atlanta
Greenblatt, Robert B., Augusta
Greene, Edgar H., Atlanta
Gross, O. S., Vidalia
Grove, Lon, Atlanta

H

Hall, S. J., Savannah
Hall, W. D., Calhoun
Ham, Emerson, Savannah

Hamff, L. H., Atlanta
Harbin, William, Rome
Harper, G. T., Dewey Rose
Harper, H. T., Augusta
Harrison, M. T., Atlanta
Harrold, Thos., Macon
Hatcher, Milford B., Macon
Head, M. M., Zebulon
Helton, B. L., Sandersville
Henderson, C. A., Savannah
Hendry, Katherine, Blackshear
Hilsman, A. H., Albany
Hines, John H., Atlanta
Hunt, K. S., Griffin
Hodges, C. A., Dublin
Hodgson, Fred G., Atlanta
Holton, C. F., Savannah
Howard, Lee, Savannah
Howkins, John S., Savannah
Huey, H. G., Homerville
Hunter, F. C., Augusta
Huson, W. J., Covington

J

Jenkins, H. B., Donalsonville
Jenkins, O. W., Lindale
Johnson, E. C., Savannah
Joiner, R. M., Moultrie
Jones, Jabez, Savannah
Jones, W. R., Columbus

K

Kay, James B., Byron
Keen, O. F., Macon
Kelley, Albert J., Savannah
Kelly, G. Lombard, Augusta
Kennedy, R. L., Metter
Keaton, J. C., Albany
Killam, F. H., Greensboro
King, J. L., Atlanta
King, Ino. T., Thomasville
King, Ruskin, Savannah
Kirkland, S. A., Atlanta
Kracke, Roy R., Atlanta
Kusnitz, M., Jr., Alamo

L

Lancaster, E. M., Shady Dale
Lang, G. H., Savannah
Landham, J. W., Atlanta
Lamm, J. H., Atlanta
Laws, Clarence, Atlanta
Leadingham, R. S., Atlanta
Levington, Henry, Savannah
Lipscomb, Laura, Cumming
Lipscomb, W. E., Cumming
Lokey, H. M., Atlanta
Long, W. V., Savannah
Longino, D. R., Atlanta
Lowance, M. I., Atlanta
Lowe, W. R., Midville
Lunsford, Guy G., Atlanta
Lynn, S. C., Savannah

M

Maloy, C. J., McRae
Malloy, Martin L., Vienna
Maner, Edwin N., Savannah
Massee, Jos. C., Atlanta
Massoud, M. A., Pineora
Martin, R. V., Savannah
Martin, Wm. O., Atlanta
Matthews, W. E., Augusta
McAllister, J. A., Atlanta
McCall, J. T., Rome
McCarver, W. C., Vidette
McCollum, R. R., Kingsland
McDonald, Harold, Atlanta
McDougall, J. Calhoun, Atlanta
McElveen, J. M., Brooklet
McGahee, R. C., Augusta
McGeary, W. C., Madison

McGibony, J. T., Thomasville
McGinty, A. P., Atlanta
McLaughlin, C. K., Macon
McMichael, V. H., Macon
Mercer, J. E., Vidalia
Mooney, A. J., Sr., Statesboro
Mulherin, Wm. A., Augusta
Muse, L. H., Atlanta
Miller, H. A., Monroe
Mitchell, W. C., Smyrna
Minchew, B. H., Waycross

N

Nicolson, Wm. Perrin, Atlanta
Nevil, J. L., Metter
Neville, R. L., Savannah
Nippert, P. H., Atlanta
Neel, M. M., Atlanta
Norton, Walter, Savannah
Newsome, Emory G., Sandersville

O

Oppenheimer, R. H., Atlanta
O'Neill, J. C., Savannah
Osborne, V. W., Atlanta
Oliver, R. L., Savannah

P

Palmer, J. W., Ailey
Paty, R. M., Jr., Emory University
Persall, John T., Augusta
Perkinson, W. H., Marietta
Pruitt, M. C., Atlanta
Peterson, T. A., Thomasville
Pierotti, J. V., Atlanta
Pittman, C. S., Tifton

Q

Quattlebaum, J. K., Savannah

R

Randolph, W. T., Winder
Rawls, Kathrine, Sylvania
Rayle, A. A., Atlanta
Reavis, W. F., Waycross
Redd, Stephen C., Atlanta
Redfearn, J. A., Albany
Redmond, C. G., Savannah
Redmond, C. R. A., Savannah
Rhodes, R. L., Augusta
Ridley, C. L., Macon
Richards, W. R., Greensboro
Richardson, Chas. H., Macon
Richardson, Jeff L., Atlanta
Righton, Harry, Savannah
Risteen, W. A., Augusta
Ritch, T. G., Jesup
Ritch, Una, Jesup
Roberts, W. H., Augusta
Robertson, Righton, Augusta
Rogers, J. V., Cairo
Rosen, Samuel F., Savannah
Rozar, A. R., Macon
Rubin, S. N., Gordon
Rubin, Samuel, Savannah
Rushin, C. E., Atlanta

S

Sage, Dan Y., Atlanta
Saggus, J. G., Harlem
Sauls, H. C., Atlanta
Scheye, Elin Schaefer, Savannah
Scheye, H. W., Savannah
Schley, Frank, Columbus
Selman, W. A., Atlanta
Shanks, Edgar D., Atlanta
Sharp, C. K., Arlington
Sharpe, W. W., Alma
Sharpley, H. F., Jr., Savannah
Shaw, L. W., Savannah
Simonton, Fred H., Chickamauga
Sinkoe, Samuel J., Atlanta

Simmons, J. W., Brunswick
 Smith, Geo. B., Rome
 Smith, H. A., Americus
 Smith, J. R., Hahira
 Smith, L. M., Charleston
 Smith, W. K., Pembroke
 Standifer, J. G., Blakely
 Starr, Trammell, Dalton
 Stillman, John D., Waycross
 Stoner, W. P., Waycross

T

Taylor, Lloyd B., Savannah
 Tidmore, J. C., Dawson
 Tidmore, T. L., Atlanta
 Thomas, W. C., Brunswick
 Thompson, Cleveland, Millen
 Thompson, D. N., Elberton
 Tippins, H. L., Miami, Fla.
 Touchton, Geo. L., Savannah
 Train, John K., Savannah
 Travis, W. D., Covington
 Turner, W. W., Nashville

U

Upson, E. T., Savannah
 Usher, Chas., Savannah

V

Van Buren, E., Atlanta
 Venable, D. R., Columbus
 Vogt, Elkin, Atlanta

W

Walden, K. C., Wilmington, N. C.
 Walker, Geo. L., Griffin
 Wahl, Ernest, Thomasville
 Wall, C. K., Thomasville
 Wall, W. H., Blakely
 Walton, John M., Atlanta
 Warren, William C., Atlanta
 Watson, E. R., Atlanta
 Watts, J. W., Bowdon
 Weaver, O. H., Macon
 Whelan, Edward J., Savannah
 Wheelchel, Guy O., Athens
 Whipple, R. L., Atlanta
 Whitley, L. L., Athens
 Williams, L. W., Savannah
 Williams, P. L., Cordele
 Whitley, James R., Dalton
 Willis, T. V., Brunswick
 Winchester, M. E., Brunswick
 Wilson, S. Elliott, Savannah
 Wilson, W. D., Savannah
 Wood, D. Lloyd, Dalton

Y

Yampolsky, Joseph, Atlanta
 Yarbrough, Y. H., Milledgeville
 Youngblood, Sam, Savannah
 Youmans, H. D., Lyons

GUESTS AND VISITORS

Allen, Arthur W., Boston, Mass.
 Bussey, Leroy, Fort Worth, Texas
 Coles, T. H., Richmond, Va.
 Cooperman, M., Brunswick,
 U.S.P.H.S.
 Foote, Wm. D., Washington, D. C.
 Glynn, Martin Q., New York, N. Y.
 Hoyt, L. H., Boston, Mass.
 James, Robert E., Savannah,
 U.S.P.H.S.
 Kennedy, Putnam C., Atlanta
 Lyon, C. C., New York, N. Y.
 Marquardt, Robert G., Fort Screven,
 Ga.
 McClure, J. R., Cincinnati, Ohio
 Moore, L. D., Ft. McPherson, Ga.
 Newnan, H. R., Hunter Field, Ga.
 Ross, Peter W., Passaic, N. J.
 Riner, C. R., Columbia, S. C.
 Rion, J. W., Atlanta
 Thayer, Edwin T., Washington, D. C.
 Weinstein, Jack L., Camp Stewart,
 Ga.
 Whitaker, Robt. F., Emory University

NEWS ITEMS

The Sixth District Medical Society met at Ridley Hall, Macon, June 28. Titles of papers on the scientific program were, "Eye Injuries" by Dr. C. K. McLaughlin, Macon; "Psychopaths in the Armed Forces," Major Louis I. Sharp, Jr., Warner Robins, Ga.; "Hyperthyroidism," Dr. Chas. H. Richardson, Macon; "Public Health Problems," Dr. J. D. Applewhite, Macon.

Dr. C. R. A. Redmond has been appointed assistant Chatham County physician to serve while Dr. Thos. J. Charlton is on leave of absence in military service.

Dr. T. F. Sellers, director of the laboratories of the State Department of Public Health, Atlanta, spoke to the medical students of the University of Georgia School of Medicine, Augusta, May 23. He was entertained by Dr. Abe J. Davis, Richmond County Commissioner of Health.

Dr. John P. Garner, Atlanta, entered the Medical Corps of the United States military forces in November as first lieutenant and has been promoted to captain. He is surgeon at a hospital at one of the United States' air bases in India. His friends and former patients are highly pleased with his advance. Captain Garner for a number of years did private practice in Atlanta and served as assistant chief surgeon for the Atlanta and West Point Rail Road Company, The Western Railway of Alabama, Georgia Railroad, and the Atlanta Joint Terminals. His father was an officer in the medical corps of the U. S. Army during World War I. While Captain Garner is in military service, his wife and three sons will make their home with Dr. and Mrs. J. R. Garner at 794 Springdale Road, N. E., Atlanta.

Dr. Leon E. Brawner announces that he has resumed practice after the recovery from a recent illness. Practice limited to diseases of the eye, ear, nose and throat in Suite 803 Medical Arts Building, Atlanta.

Dr. W. P. Woodall, former resident surgeon of the Macon City Hospital, resigned and entered the medical corps of the U. S. Army.

Dr. J. P. Kennedy, Atlanta Health Officer, retired June 30. He held this office for 43 years and in the beginning of his work he constituted the entire personnel of the department. Now the health department has almost 200 employees.

Dr. Herschel B. Bray announces the opening of his new hospital in Wrightsville. He graduated at Emory University School of Medicine, interned at Grady Hospital, Atlanta, and took post-graduate work at the Cook County Graduate School of Medicine, Chicago. He has an extensive practice and an enviable record of success.

The Bulletin of the Fulton County Medical Society published in its July issue the names of all officers and committeemen, complete directory of its members and the President's Message—"Patriotism"—by Dr. Ben H. Clifton.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, July 6. Titles of papers on the scientific program were: "An Army Amputation Center" by Lt. Col. E. C. Lowry (MC), chief of Surgical Service; Major E. C. Holscher (MC), Chief of Orthopedic Section; and Capt. M. M. Kissane (MC), assistant, Amputation Center (MC); "War Neuroses," Maj. A. R. Anderson (MC), assistant chief, Neuropsychiatric Service; "Modern Concepts of Coronary Artery Disease," Major R. Bruce Logue (MC), chief of Cardiovascular Section.

The Hanovia Chemical & Mfg. Co., Newark, N. J., is again manufacturing model ultraviolet lamps. Three types are available, known as the travel, home and prescription.

OBITUARY

Dr. Walter Clarence Robinson, Atlanta; member; Southern Medical College, Atlanta, 1881; aged 88; died June 17, 1944. He was a native of Meriwether County. He had practiced medicine in Atlanta for 58 years and retired 2 years ago. Dr. Robinson was a member of the Fulton County Medical Society, American Medical Association and the Baptist Tabernacle. Surviving him are his widow, one daughter, Mrs. A. Q. Smith, Atlanta; two sons, Walter Robinson, Nashville, Tenn., and John A. Robinson, Detroit, Mich. Rev. P. C. James officiated at the funeral services conducted at the chapel of Awtry & Lowndes. Burial was in Oakland Cemetery.

Dr. Stephen Trent Barnett, Atlanta; member; University of Virginia Department of Medicine, Charlottesville, Va., 1896; aged 73; died June 27, 1944. He was a native of Lynchburg, Va., and received his A.B. degree from Hampden-Sydney College. He began practice in Atlanta in 1899. Was visiting gynecologist at Grady, Emory University, Crawford W. Long Memorial, Georgia Baptist hospitals, and St. Joseph's Infirmary. Dr. Barnett was a member and one time president of the Fulton County Medical Society, member of the American College of Surgeons, Southern Medical Association, American Medical Association; he was a member and deacon of the First Presbyterian Church; member of the Masons, Shrine, and a number of clubs. Surviving him are his daughter, Mrs. George Crosby, Fort Sill, Okla.; one son, Lt. Stephen T. Barnett, Jr. (MC) with the U. S. Navy. Dr. William V. Gardner officiated at funeral services conducted at Spring Hill Chapel.

Dr. Foster Pierce Harbin, Lumber City; member; Emory University School of Medicine, Atlanta, 1914; aged 56; died June 15, 1944, in Brunswick where he had practiced for one and one-half years. He was a native of McRae. Dr. Harbin practiced in Oconee and Lumber City before going to Brunswick. Surviving him are his widow, two daughters, Faye and June Harbin, all of McRae; one son, Donald Harbin, Brunswick. Rev. L. A. Cunningham officiated at the funeral services conducted from the McRae Methodist Church and at the same time memorial services were held for his son, Lt. Foster Pierce Harbin, Jr., who was killed over Germany in combat duty on March 22, 1944. Burial was in the family cemetery at McRae.

Dr. George Monroe Tolhurst, Atlanta; International Medical Missionary College, Atlanta, 1908; aged 69; died June 27, 1944, from injuries incurred from a fall at his home. He was a native of Ohio. Surviving him are his widow, two sons, G. M. Tolhurst, Jr., and Clarence M. Tolhurst, Atlanta; two daughters, Mrs. E. R. Kreigsman, Miami, Fla., and Mrs. O. E. Sherrell, Atlanta. Funeral services were conducted at Sam R. Greenberg and Company's Chapel.

The Medical Association of Georgia will hold its Ninety-Sixth Annual Session at Macon, May 8, 9, 10, 11, 1945.

EMORY UNIT GIVES HEALTH TO THOUSANDS OVERSEAS

The Forty-third General Hospital Unit—known here as the Emory University Hospital Unit—is restoring thousands of American soldiers to health in the Mediterranean theater, and at the same time carrying on valuable studies, an Army press release disclosed recently.

Casualties from the Italian battlefronts are being treated at the hospital, as well as soldiers suffering from accidental injuries and "run-of-the-mill" illnesses. Sixty per cent of the hospital is under canvas, and the rest of it in huts and a few stone structures.

Closely checked observations of malaria patients are being made at the hospital, and special studies are also in progress concerning "trench feet" and "fever—undetermined origin." Soldiers who spend long periods in foxholes in wet, cold weather are subject to trench feet. Very little is known about the fever, except that it produces chills, fevers and high body temperatures for several days, then disappears.

Of the 5,500 patients admitted to the hospital from last October to May, 1,710 have been returned to full duty, 442 have been returned to limited duty in the Mediterranean theater, and some have been sent to this country for convalescence.

Atlantians and Georgians at work at the hospital were listed as follows:

Atlanta

Capt. Elbert B. Agnor	Lt. Doris McDaniel
Capt. William B. Armstrong	Lt. Willie L. Rainwater
Maj. Milus K. Bailey	Lt. Nina E. Rusk
Maj. Launcelot M. Blackford	Lt. Marianne S. Tiller
Capt. Frank K. Boland, Jr.	Lt. Elizabeth W. Watkins
Capt. Joseph H. Boland	Lt. Elizabeth V. Westbrook
Maj. William W. Bryan	Sgt. Moses J. Berman
Maj. Benjamin R. Burke	Sgt. Wm. F. Collar, Jr.
Capt. James W. Chambers	Sgt. Charles Dunaphane
Maj. Thomas S. Claiborne,	Sgt. Floyd H. Greenbill
Maj. John B. Cross	Pvt. John E. Robinson
Capt. Harry A. Crosswell	Sgt. Aubrey H. Smullian
Lt. Col. Ira A. Ferguson	Sgt. James F. Stainbeck
Capt. Wm. L. Funkhouser, Jr.	Sgt. Alan B. Stewart
Capt. Harry S. Gibboney, Jr.	

Other Addresses

Capt. Allen E. Hauck	Lt. Novell A. Rowamn, Adel
Capt. Byron J. Hoffman	Lt. Doris McDaniel, Augusta
Capt. Julius C. Hughes	Lt. Delta Ree E. Hall, Albany
Capt. John H. Lange	Lt. Melba McLendon, Albany
Maj. Albert O. Linch	Lt. Virginia D. Baldwin, Ame
Capt. Robert F. Mabon	Lt. Vera Bowen, Bristol
Maj. John D. Martin, Jr.	Lt. Sara F. Riley, Butler
Maj. Francis P. Parker	Lt. Jackie Almand, Camilla
Capt. Charles F. Stone, Jr.	Lt. Edith M. Grupe, Cedartown
Maj. Cyrus W. Strickler, Jr.	Capt. R. L. Gibson, Columbus
Maj. Wm. H. Trimble	Lt. Eva L. Nichols, Columbus
Capt. John L. Tye, III	Sgt. Samuel A. King, Concord
Lt. Col. Richard H. Wood	Lt. Sara C. Bennett, Cordele
Lt. Thelma A. Barrett	Lt. Leila J. Johnson, Covington
Lt. Hazel M. Bell	Sgt. Jer. J. Morgan, Decatur
Lt. Margaret P. Bodeker	Lt. Ruby M. Beckman, Edison
Lt. Ruth M. Marsh	Lt. Jane Adams, Elberton

Lt. Alice N. Ragan, Elko
 Capt. Minnie G. Persons, Ellaville
 Capt. Wm. E. Goodyear, Emory University
 Lt. Hazel D. Whitaker, Floville
 Lt. Margaret K. Lifsey, Forsyth
 Maj. Hartwell Joiner, Gainesville
 Lt. Margaret F. Shepherd, Good Hope
 Lt. Ethel M. Smith, Jackson
 Lt. Onia Spinks, Junction City
 Lt. Martha S. Guinn, LaGrange
 Lt. Laura Nages, Lawrenceville
 Lt. Julia M. Trevethick, Marietta
 Capt. Frederick A. Smith, Jr., McRae
 Lt. Udine Hall, Moultrie
 Lt. Harriet H. Hardman, Moultrie
 Lt. Emma R. Rossman, Moultrie
 Lt. Mildred J. Rossman, Moultrie
 Lt. Grace L. Whittemore, Oakman
 Lt. Juanita C. Schmierer, Pitts
 Capt. Edward L. Bosworth, Rome
 Lt. Zula A. Colquitt, Rome
 Lt. Francis G. Elrod, Richmond
 Lt. Kathleen Rumble, Smarr
 Lt. Elsie M. Hunter, Sylvester
 Lt. Rhoda G. Cantrell, Tate
 Capt. Robert H. Gillespie, Thomasville
 Lt. Mary F. Kelley, Toccoa
 Lt. Dorothy B. Harper, Villa Rica
 Pvt. Cecil M. Whitlock, Villa Rica
 Sgt. Thomas E. Burke, Waycross
 Lt. Loyce Douglas, Waycross
 Capt. Anderson D. Ferguson, West Point
 Lt. Merle D. Simmons, Winder
Atlanta Journal, Atlanta,
 June 5, 1944.

WOMAN'S AUXILIARY PRESIDENT'S REPORT

(Continued from page 230)

It is due to the splendid cooperation of our Advisory Committee, state officers and chairmen, and to the untiring efforts of each county president and member, that the above accomplishments have been possible this year.

My thanks are gratefully extended to Dr. W. A. Selman, president of the Medical Association of Georgia; also to Dr. James N. Brawner, Sr., chairman of the Advisory Committee, and to the members of the committee: Dr. C. D. Bowdoin, Dr. J. Lon King, Dr. A. S. Bacon, Dr. Eustace A. Allen and Dr. Olin S. Cofer. I also wish to thank Dr. E. D. Shanks, editor of *THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA*, for his splendid assistance during my term of office.

We who have served have the priceless heritage of your support, your loyalty, and your splendid cooperation — we shall cherish them always.

The University of Illinois College of Medicine announces that its fall didactic and clinical refresher course for specialists in otolaryngology will be held at the college from September 25 to 30 inclusive. The fee for the course is \$50.00. Since registration is limited to 25, applications should be filed as early as possible. Write for information to Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

DURING FOOD SHORTAGES

It is well to bear in mind that *dried brewers yeast, weight per weight, is the richest food source of the Vitamin B Complex*. For example, as little as 1 level teaspoonful (2.5 Gm.) Mead's Brewers Yeast Powder supplies: 45 per cent of the average adult daily thiamine allowance, 8 per cent of the average adult daily riboflavin allowance, 10 per cent of the average adult daily niacin allowance.

This is in addition to the other factors that occur naturally in yeast such as pyrodoxin, pantothenic acid, etc.

Send for tested wartime recipes, the flavors of which are not affected by the inclusion of Mead's Brewers Yeast Powder.—Mead Johnson & Company, Evansville, Ind., U. S. A.

DR. RICHARDSON WITH SQUIBB

Dr. Arthur P. Richardson, Head of the Department of Pharmacology of the University of Tennessee, has been appointed Head of the Department of Pharmacology of the Squibb Institute for Medical Research, to become effective on October 1, 1944. Dr. Richardson will replace Dr. H. B. VanDyke, who has accepted the position as Head of the Department of Pharmacology, College of Physicians and Surgeons, Columbia University.

Dr. Richardson is a native of Longmont, Colorado, but obtained his A.B. and M.D. degrees at Stanford University (California) in '32 and '37 respectively. While taking his doctoral degree, he was assistant in pharmacological research ('33-'36), and then remained at Stanford as instructor in pharmacology ('37-'38), and later as assistant professor ('39-'41). He spent a year as National Research Council Fellow at Johns Hopkins ('38-'39). He then became visiting associate professor at the University of Tennessee Medical School, Memphis, Tennessee ('41), where he has since remained as associate professor ('41-'43), professor ('43-) and head of the department ('41-).

Dr. Richardson's chief interests have been in the field of chemotherapeutic research, and he has had very extensive experience in studies concerning malaria and other tropical diseases. For the past two years he has been primarily engaged in the study of antimalarial compounds.

BUY UNITED STATES GOVERNMENT
 BONDS

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ULCERS OF THE STOMACH AND DUODENUM

ARTHUR W. ALLEN, M.D.
Boston, Mass.

Mr. President and members of the Medical Association of Georgia: To be permitted the privilege of being added to the list of illustrious men who have preceded me in honoring your distinguished past president, Dr. Abner Wellborn Calhoun, is recognized by me as an award far beyond my merit. It is with a definite feeling of inadequacy, but one of due appreciation, that I undertake this responsibility. Those of you who may still remember Dr. Calhoun, and all of you who know of his remarkable personality, integrity, ability, skill, and generosity, will realize the difficulty one has in presenting philosophic or scientific data worthy of his memory. I am sure that the establishment of this lecture in his honor was not for the purpose of eulogy but to bring before you each year material relating to the progress in some phase of our knowledge concerning health and disease. Since my talents, if any, are chiefly clinical, I wish to present to you today the results of my studies concerning the problem of ulcers of the stomach and duodenum.

GASTRIC ULCER

It is my belief that we should distinguish so clearly in our minds the difference between ulcer of the stomach and ulcer of the duodenum that we should no longer consider them under the heading "peptic ulcer." In order to avoid serious results from this time-honored custom, I believe we would do well to exert our efforts to

entirely abandon the term "peptic ulcer." Although benign ulcer can affect the stomach, we are confronted with an entirely different problem when we meet an apparent similar situation in the duodenum. It is impossible, by any of the diagnostic methods at our disposal at the present time, to be certain that an ulcer of the stomach is benign. Often we have seen apparent benign ulceration of the gastric mucosa that proved to be cancer. If we are going to increase the cure-rate of cancer of the stomach, we must take seriously into consideration the acceptance of the principle which I shall set forth before you today; that is, we should consider gastric ulcer as a surgical lesion. This does not mean that all gastric ulcers are immediately subjected to surgery, but it does mean that all gastric ulcers must be kept under close observation until completely healed and that the follow-up studies must include x-ray and gastroscopic examinations even after the symptoms have clinically subsided. By this method alone can we avoid having an apparent benign ulcer finally appear for surgical treatment as inoperable cancer.

The interim of time between apparent innocence and inoperability may be as short as three or four months. On the other hand, it may take over a year before the manifestations of malignant disease are evident. We cannot lose sight of the fact that cancer of the stomach heads the list for all cancer deaths in the United States. It is probably safe to estimate that approximately 35,000 people die of cancer of the stomach in this country every year. So far our only possible hope of improving these figures or increasing our cure-rate by surgery is by education of the public and of the physicians regarding early signs and symptoms. It is admitted that many cases of carcinoma of the stomach produce such

The Abner Wellborn Calhoun Lecture before the Medical Association of Georgia, Savannah, May 10, 1944.
Chief, East Surgical Service, Massachusetts General Hospital, and lecturer Harvard Medical School, Boston, Mass.

minor symptoms, and are so insidious in onset, that the patient appears for treatment in a hopeless state. On the other hand, indigestion, weight-loss, anorexia, and the feeling of weakness occurring after the age of 40 should be looked upon by the physician as possibly due to cancer of the stomach. It is important to legislate against the advertising of medicine to relieve indigestion, pain after eating, loss of appetite, etc. People must be made to realize that their symptoms should be carefully investigated by modern scientific methods so that proper treatment may be instituted.

Duodenal ulcer occurs with much greater frequency than ulcer of the stomach. Since duodenal malignancy practically never develops from ulcer, and since our experience has been so much greater in the management of this lesion than it has in the management of gastric ulcer, clinicians have been too prone to consider both entities together. They are inclined to treat both lesions in the same manner. The large experience that has been accumulated regarding the proper treatment of duodenal ulcer has brought about a satisfactory solution for that particular lesion. It is perfectly true that gastric ulcer does respond in many instances to much the same regimen that one ordinarily institutes for duodenal ulcer. It is well known, however, that many gastric ulcerations, although apparently responding well enough at first to conservative measures, will be on the whole less satisfactorily treated even though they are true benign ulcers. Judd and Priestley found at the Mayo Clinic that approximately 50 per cent of the patients with benign gastric ulcer were relieved on a medical regimen, while only one patient out of 162 treated surgically was dissatisfied with his result. They found in their series that gastric ulcer finally proved to be cancer of the stomach in 9.6 per cent of their cases. In our own cases we found a higher diagnostic error in a group of 277 patients studied: there was an over-all diagnostic error of 14 per cent. In other words, 14 per cent of the patients who had been diagnosed and treated as benign gastric ulcer finally proved to have cancer of the stomach.

It is important to stress the fact that the question has never been satisfactorily settled as to whether gastric cancer can actually develop on gastric ulcer. There is some definite pathologic evidence that benign ulcer may change into a malignant lesion. There are ulcers, part of which are completely benign, with a section or edge that is characteristic of cancer. The probabilities are that actually these ulcerative lesions do, on occasion, change from a benign ulcer to a malignant one. On the other hand, one does not need to assume that this takes place since it is perfectly possible for the ulcerated cancer lesion to start as cancer and still give all the symptoms and signs that we see in benign ulcer.

One of the most difficult situations to explain is the fact that an ulcer of the stomach may actually appear to heal on a conservative regimen and finally prove to be cancer. The probabilities are that all ulcerative lesions have an areola of inflammatory reaction about them. It is this inflammation that probably causes the pain and the indigestion frequently seen. On a careful, conservative regimen of bed rest, a bland smooth diet, freedom from stress and strain, the administration of belladonna and some form of aluminum hydroxide, these ulcers actually diminish in size as shown on the roentgen film and appear to be healed when examined by gastroscopy. It is possible that this ulcer crater may actually become filled in with granulation tissue, or conceivably by cancer cells, in such a manner as to make the true diagnosis difficult by our present diagnostic methods. When one sees this sort of response, only to have the patient return in a period of three or four months with full-blown cancer of the stomach with nodal involvement, one realizes the importance of more careful follow-up in such cases. I am of the opinion that one month after we get a response to conservative treatment of gastric ulcer, the studies should be repeated and the victim's symptoms evaluated. If at this time there is still evidence of ulcer, or if by any chance the ulcer has resumed its former size or grown larg-

er, then surgery should be instituted without further delay. If we allow these patients to be treated in an ambulatory fashion as we often treat duodenal ulcer, we are likely to lose an opportunity to cure them of cancer of the stomach.

When we analyzed our own cases and found that our diagnostic ability was so poor in gastric ulcer, we decided to study all of the various factors in the hope that we might uncover data that would be more reliable in making the true diagnosis. We found that we could learn a good deal by studying the age of the patient, the duration of the symptoms, the acidity found in the stomach contents, the location of the ulcer, and the size of the ulcer. For instance, it proved that our gastric ulcers in the immediate 2 centimeters proximal to the pyloric ring, regardless of how small they were, proved to be malignant in 65 per cent of the cases. Ninety per cent of those appearing on the greater curvature proved to be cancer and not benign ulcer. Twenty per cent of those involving the anterior and posterior walls were malignant, and 10 per cent of those on the lesser curvature proved to be cancer. This was helpful regarding the prepyloric and greater curvature areas, but was somewhat misleading regarding the lesser curvature region. The reason is that 50 per cent of all the gastric ulcerations seen in our hospital were on the lesser curvature. We also found that almost all of our diagnostic errors were in lesser curvature lesions. For this reason one must be on the alert and constantly aware of the possibility of malignant disease on the lesser curvature ulceration.

The size of the ulcer when first recognized was of some help, since on the whole, the smaller the lesion the less likelihood it would prove to be cancer. As a matter of fact, we found two extremely small ulcers in the prepyloric region that were malignant. Also, three different members of our staff have done total gastrectomies for what was thought to be very unfavorable cancer with tremendous ulcerations and clinically malignant lymph nodes, only to have, in these three instances, a pathologic

diagnosis of benign ulcer. Actually, the benign ulcers average 1.7 cm. in diameter, while those showing cancer average 2.3 cm. in diameter. The majority of the ulcers over 2.5 cm., regardless of their location, proved to be cancer.

Gastric acidity has long been thought by clinicians to be of importance in a differential diagnosis between cancer and ulcer of the stomach. It is perfectly true that, in our proven cases of cancer of the stomach, 60 per cent showed no free hydrochloric acid on gastric analysis. Therefore, if one has an achlorhydric stomach with an ulcerative lesion, one can feel pretty sure that cancer is present. On the other hand, in our ulcer-cancer group where the differential diagnosis was difficult to make, we found that those cases proved to have cancer had just as high levels of acidity as those proving to have benign ulcer. In other words, the presence of acid in the stomach does not in any way mean that the lesion is benign. We can only discount this evidence if acidity is present, and rely on other methods of diagnosis to guide us.

The age of the patient is some help in the differential diagnosis, since it is well known that malignancy occurs with greater frequency in the older age group. If, however, one combines the duration of symptoms with the age of the patient, one really has an important guide as to the true nature of the lesion. In patients over 50 years of age with gastric ulcerations that have produced symptoms for less than one year, the chances are five times as great that that patient has cancer instead of benign ulcer. If, on the other hand in the same age group, the symptoms have existed for over a period of five years, then the patient is five times as likely to have a benign lesion as a malignant one. In other words, patients of middle life, or beyond, who have an ulceration of the stomach of short duration without previous history, are almost certain to have cancer. In this group, one must assume that it is malignant and proceed with radical treatment at the earliest practical moment.

It is interesting that the group of patients subjected to gastrectomy for an ul-

cerative lesion thought to be benign, have twice as good a chance of living over five years as those patients who were subjected to gastrectomy for clinical cancer. This brings up a feature concerning the operative technic, which I should like to stress. If one has an ulcerative lesion of the stomach that is obviously malignant or thought to be malignant, one does a careful dissection, en bloc, of the lesion with a wide margin and all of the lymph nodes draining the area. This includes the great omentum, all of the nodes in the region of the right gastro-epiploic and gastro-duodenal arteries, and particularly those arising along the left gastric vessels near the celiac axis. If one can include these regions in ulcerative lesions of the stomach that are only suspicious or equivocal as to the diagnosis, one may by this method materially increase the cure-rate for surgery in dealing with cancer of the stomach. At the moment we are able to cure a little over 20 per cent of the cases of cancer of the stomach that are resectable, and this includes operative mortality. In gastrectomies for small lesions thought by the clinicians to be benign and proved by the pathologists to be cancer, the cure-rate is more than 40 per cent. It is only by better diagnostic methods, early and more radical operative procedures that we can hope to improve the low instance of cure in this common malady.

I think one should also consider seriously the fact that gastrectomy for gastric ulcer is attended by much less risk than gastrectomy for duodenal ulcer. The reason for this is that in gastric ulcer the problem of the duodenal stump is eliminated. When the duodenum is scarred by ulcer and secondary inflammatory reaction, it requires all the ingenuity of an experienced surgeon to deal with the region satisfactorily. The danger of injuring the common bile duct, the portal vein, and the hepatic artery have brought about due respect for this area in the presence of duodenal ulcer. In transecting the normal duodenum, which one finds in gastric ulcer, this problem is entirely eliminated. In a long series of gastrectomies for gastric ulcer done by

various members of the surgical visiting and resident staff of the Massachusetts General Hospital, there was only one fatality. This was in a 77-year-old-man, who died of coronary occlusion eight days following operation. The group now comprises a series of approximately 125 patients.

I am not sure that our own gastro-enterologic department would admit that they failed to satisfy a large number of the patients treated conservatively for gastric ulcer. I know that they are very suspicious of this lesion and watch these patients with extreme care. If they have any tendency to early recurrence or if they are slow to heal, or if their ulcers are in one of the more susceptible areas of the stomach, they are referred to the surgical department without further delay. I think it is safe to say, however, that the medical staff is quite content to carry many of those patients on a medical regimen, who respond well to conservative treatment.

We are certain that patients who have had partial gastrectomy for gastric ulcer have remained symptom-free and have been able to carry on their usual occupation without difficulty. The great complication of any surgical procedure for duodenal ulcer is the so-called jejunal or anastomotic ulceration. It must be pointed out that subtotal gastrectomy for gastric ulcer never leads to an anastomotic ulceration. It is difficult to understand at the moment why this is true. Doubtless it is related to a difference in the physiology and the pathology of ulcer of the stomach and ulcer of the duodenum. This is another reason why I believe these two lesions should be considered as separate problems.

We feel, then, that immediate radical surgery in gastric ulcer is indicated if the symptoms are of short duration and the patient is over 40 years of age; also, if the ulcer is over 2.5 cm. in diameter. Naturally, we would include all ulcers found in achlorhydric stomachs. Also, we should operate early on all ulcers in the immediate prepyloric region and on the greater curvature. We feel that ulcers on the lesser curvature of the stomach, where most of them occur, should be very carefully watched.

If this ulcer is recalcitrant to conservative measures, has a tendency to recur or is deeply penetrated, one should then proceed with surgery.

Now, as to the type of ulcer of the stomach that can be safely treated conservatively, I wish to say that if the ulcer is acute in a young patient, is under 1 cm. in diameter, or if it is on the lesser curvature or anterior or posterior wall of the stomach, one might do well to treat such a patient conservatively on the basis that benign ulceration is much more likely than malignancy. These patients, however, should be watched in the hospital for one month and then they should be re-examined. If the ulcer is still present, even though partially healed at the end of one month, then surgery must be undertaken. If, however, the healing has been satisfactory, one should at frequent intervals follow this patient from the standpoint of a possible recurrence. If the ulcer does not stay healed, then surgery is indicated.

DUODENAL ULCER

Duodenal ulcer is an extremely common lesion. It is seen in large clinics seven to ten times as often as benign ulcer of the stomach. A good many years ago it was felt that the only sensible treatment was to decrease the acid level in the stomach by doing some sort of an operation that allowed the alkaline secretions from the liver and pancreas to flow into the stomach with greater ease. It has long been recognized that duodenal ulcer does not occur without acid in the stomach. At one time it was felt that pyloroplasty or gastro-enterostomy was the proper treatment for this lesion. It soon became evident, however, that this was an unsatisfactory concept since many of these patients not only were relieved of their symptoms temporarily but frequently developed more serious ulcerations at the site of the anastomosis. During this era it was natural that the internists should look about for a more satisfactory manner of relieving these patients. Soon it became obvious that if a patient with duodenal ulcer would conform to certain conservative methods of life he could heal this lesion; and with a

reasonable amount of care keep himself comfortable and happy and able to do his usual form of work. It finally came about that in the large clinics, where a great many patients with duodenal ulcer are seen, approximately 80 per cent of them were able to carry on in a satisfactory manner on conservative treatment. In an analysis of the end-results from gastro-enterostomy done for duodenal ulcer at the Massachusetts General Hospital prior to 1926, it was found by Fremont-Smith and McIver that approximately 80 per cent of the patients had a reasonably good result. It is strange and interesting that this figure of 80 per cent is nearly identical with that of a satisfactory medical regimen alone. This means that if 20 per cent of all ulcer patients get into trouble following gastro-enterostomy or pyloroplasty, and if under good management 20 per cent of them still have to have surgery, one may assume that the patient, if turned over to the surgeon today, is one that cannot be cured by pyloroplasty or gastro-enterostomy.

It is extraordinary that we have no accurate idea at the moment why one individual develops duodenal ulcer and another does not. The chances are that men working on this subject will, in due course of time, give us a better answer to this question than we have today. It is already known that the duodenum contains certain elements that, if injected into the experimental animal, will prevent him from developing an ulcer in his exact counterpart who has had a procedure done that would under ordinary course of events always produce ulcer. It is quite possible that this substance may be synthesized and made available for the treatment of human ulcer. Until then, however, we must admit that there are certain complications occurring in the course of duodenal ulcer that make it necessary to subject a certain number of these patients to surgical procedures.

Approximately 25 per cent of these complications are acute perforations. This is a situation which may come on quite insidiously. There are a certain number of individuals who have perforated ulcer following a long story of indigestion — many

of them have had a previous positive diagnoses made by x-ray examinations, etc. On the other hand, there is a definite percentage of these individuals who will admit no history of indigestion. At first it was thought by most of us that this was due probably to the fact that the ulceration may have taken place in an area in the duodenum that was particularly devoid of sensory nerve fibers. More recently, however, it would appear that a better explanation is on the basis that some individuals have an unusually high threshold for pain stimuli. In one instance a man bled massively from a duodenal ulcer without any previous indigestion or warning whatever. It was found by his physician that he had no pain reaction to a second degree burn produced by a lighted cigarette on his forehead. Another instance is reported of a man, who had duodenal ulcer without symptoms, who could allow the passage of a knife through the web-space of his hand without feeling any discomfort. Whatever the explanation, we know that we must be careful not to rely too heavily on the previous history of indigestion when we are dealing with a suspected perforation of a duodenal ulcer.

The important feature regarding acute perforation is to recognize the possibility of the lesion, have the patient hospitalized at once, and have an early exploratory incision made. It is not reasonable to delay the patient from the operating room long enough to determine whether there is free air in the peritoneal cavity by x-ray examination. In communities where patients can get into the hospital quickly following this catastrophe, the mortality rate is very low. In our own clinic Ulfelder and I have found in a study of this group of patients that, if the perforation could be closed within three hours of onset of pain, the mortality rate would be under 5 per cent. If, on the other hand, operation was delayed until the second three-hour period, the mortality rate rose to 18 per cent. Therefore, early closure seems to be of utmost importance.

We also found that in our community the mortality rate was higher in the winter

months than in the summer months, and that the curve of our percentage of deaths corresponded reasonably accurately to the curve of death-rate in the State from respiratory tract infections. It has long been known that one could culture from the peritoneal cavity in a patient with perforated ulcer the same organisms that one could find in this patient's sputum. In climates where the respiratory infection is of a high virulence and more or less of a perpetual or chronic nature, it is obvious that the mortality rate from this complication of duodenal ulcer will be greater than it is in communities where the respiratory infections are of less virulence. Postoperative and anesthesia complications occur much more frequently on the North Atlantic coast line than they do in the deep South. We also have a tremendous increase in the number of thrombo-embolic complications in our patients in New England than in some of the warmer sections of the country.

We believe that the simplest operative procedure which can be undertaken is the one indicated in perforated duodenal ulcer. This consists in the fixing of a tab of omentum over the perforation after the method suggested by Roscoe Graham, of Toronto. In addition to this simple procedure, one must be sure to attempt to aspirate as much of the extravasated fluid as possible from the abdominal cavity. It is particularly important to remove under these circumstances that fluid which will invariably be found between the liver and diaphragm. The actual attempt at closure is often met with a good deal of difficulty, since the inflammatory areola around the perforation makes it necessary to place the sutures so far away from the opening that the lumen of the bowel may be encroached upon. We believe that very often it is unnecessary to consider drainage of the abdominal cavity following the closure of a perforated ulcer. In the first place, I think one must realize that the abdominal cavity as such cannot be adequately drained. In the second place, one must appreciate that it is difficult to place the drains where they will not come in contact with the suture

line, or with the small intestine, and thereby provide a point for leakage or intestinal obstruction. We believe it is wise to give these patients intravenous sulfadiazine (5 grams) during the operation, remove the fluid by aspiration, and establish no drains whatever into the abdominal cavity. Rarely, in these cases, will a residual collection of fluid in the gutters or in the pelvis or even in the subdiaphragmatic region need to be drained as a secondary procedure. We do not believe that these complications could have been prevented by so-called drainage of the abdominal cavity at the time of operation.

We think that concomitant gastro-enterostomy with the closure of perforation of the duodenum is contraindicated, and we also believe that it is rarely justifiable to consider a radical subtotal gastrectomy at this time. Once in a great while one will find a huge perforation in the second portion of the duodenum that does not allow closure in any way. This is the one exception that would justify a subtotal resection during the acute condition of perforation.

One is confronted with the problem of what to do with the duodenal ulcer patient who has recovered from his acute perforation. As a matter of fact, a great many of these patients live comfortably and happily and are able to do their usual work on a conservative regimen. A certain number of them have reactivations and perforations. It was interesting in our own group that in nine patients who returned years later with a second perforation, all recovered following the second closure. Some of these patients developed scar tissue obstruction and some of them developed intractable pain. Under these circumstances one is justified in proceeding with a surgical cure of the lesion.

Another complication of duodenal ulcer is massive hemorrhage. Almost all ulcers bleed some and 22 per cent of all of the ulcers that bleed grossly will bleed suddenly and in such proportions that shock level is reached. Actually 22 per cent of cases studied by Benedict and me were found to be of this acute, massive type. We were interested in trying to ascertain why

one patient with a sudden massive hemorrhage from a duodenal ulcer would recover and the patient in the next bed succumb during that hospital admission. We analyzed all of the common factors in these cases and it was obvious to us at the end of our studies that the younger patients almost invariably recovered spontaneously, while in the older age group the mortality rate was very high. Actually, in a very large group of these patients, under the age of 45, only two died of hemorrhage; while in those beyond the age of 45, one-third of the cases died of hemorrhage during that hospital admission. This led us to feel that one was justified in treating the younger patients, whose eroded blood vessels were sufficiently elastic to allow proper clot formation, to go along on conservative measures until they had recovered from this episode. In the older age group, however, one should consider the possibility of a radical surgical attempt to stop the bleeding in the early days of hemorrhage. We soon found that it was perfectly safe to fluoroscope these people to confirm the diagnosis of duodenal ulcer. If the bleeding was obviously from a duodenal ulcer in a patient with arteriosclerosis, we could assume that the ulcer was on the posterior wall of the duodenum, and that the eroded vessel was the gastro-duodenal artery which passes directly behind the duodenum, more or less through the capsule of the head of the pancreas. When one considers that this vessel has three sources of blood supply — one from the hepatic, one from the gastro-epiploic, and a third from the superior mesenteric — one must meet this situation on the basis of an anatomic approach. I am perfectly certain that, if one does not transect the stomach and turn it up in such a fashion as to approach the ulcer region from behind, these vessels cannot be adequately intercepted and ligated. I have often said that any patient who survives plication of the ulcer by direct approach would have survived without any operation at all. It is necessary to operate on these patients early after the hemorrhage has started, or wait until they have completely recovered. In other words,

in the younger age group, one can certainly wait with considerable safety until complete recovery has taken place, and then subject them to a radical operation at a time of election. Most of these patients who have massive hemorrhage represent a type of ulcer that will have poor results on conservative measures. The reason for this is that the ulcer is deeply penetrating into the head of the pancreas, and the bed of the ulcer is no longer duodenum but inelastic scar tissue brought about by inflammation in the pancreatic head itself. The additional hazard is that this ulcer area is overlying a large artery which, with each repeated burst of activity, will break down and produce massive hemorrhage. In addition to this, these posterior wall, penetrating ulcers are difficult to keep pain-free. For these reasons most of the patients who have had a massive hemorrhage from duodenal ulcer should be considered candidates for radical surgical cure.

In the older age group we feel that the danger of a fatal outcome is so great, that early operation increases the chances of saving the patient. This is entirely justifiable provided the operation is carried out within the first three days of the onset of hemorrhage. If one waits, however, until the patient is obviously moribund, seven to fourteen days after the onset of bleeding and then attempts to rescue the patient by surgery, the outcome will be doubtful. In six attempts on elderly patients with massive hemorrhage from duodenal ulcer, who had bled seven or more days, I was able to rescue only one. In eleven attempts done in the same age group before the third day of repeated bursts of massive hemorrhage, I was able to save ten. The one patient in this group that succumbed died of a perforation of his ulcer, which was in the second portion of the duodenum and could not actually be included in the resection. I do not want to imply that immediate operation in this elderly group of patients with massive hemorrhage may be as safe as radical operation at a time of election. I am perfectly certain that, in a large series of such patients, one would find the mortality rate at least 5 per cent.

In the same surgeon's hands operation of election for duodenal ulcer should not be more than 1 per cent.

I think the time may come when surgeons will feel that all patients with duodenal ulcer, who bleed suddenly and massively, might be considered as early surgical problems. The reason for this is that our technic has improved greatly; our preparation of the patient, our anesthesia, and our lack of complications have led us to feel that we probably could include this group with safety in our early operative attempts. The argument in favor of operation is mainly that it would save this particular individual a long period of convalescence following operation. Although fatal hemorrhages in young individuals are rare they occur with sufficient frequency to warrant using them as an argument for early surgery in the entire group of cases of acute massive hemorrhage.

The third complication of duodenal ulcer that demands surgical interference is one that comes about after repeated bouts of activity over a long period of years, producing a scar tissue obstruction at the outlet of the stomach. This usually occurs in the first portion of the duodenum just beyond the pylorus, and is insidious in onset, producing symptoms of fullness, slight distress, and occasional vomiting. As a matter of fact, this condition is associated with very little acute pain or indigestion. It has been further observed that in these patients with chronic obstruction to the stomach outlet the gastric analysis shows a low or normal acidity. Usually this condition occurs in elderly patients with a long ulcer story and must not be confused with the acute, edematous obstruction seen with an exacerbation of ulcer in younger individuals. This acute exacerbation will respond to decompression of the stomach after a week of Wangensteen suction, while the chronic phase will not respond to this method of treatment.

At one time we felt that cicatricial stenosis represented the end-result of duodenal ulcer and that it was purely a mechanical problem and that, inasmuch as it occurred in elderly individuals and the gastric analy-

sis showed a low acidity, we might consider it in a different light from other complications of duodenal ulcer requiring surgery. This led us to believe that this was the one type of ulcer that one could justifiably treat by pyloroplasty or gastro-enterostomy. We have regretted this attitude inasmuch as more than 25 per cent of the patients on whom we have done gastro-enterostomy for this type of lesion have developed jejunal or anastomotic ulcer. It is our opinion then that these patients, even though they are elderly, should have the benefit of a removal of all of their antral cells and this is easiest accomplished by a radical distal subtotal gastrectomy. If one does a simple gastroenterostomy on such a patient, it is easy to prove that the previous high acid level in the gastric secretions returns. In other words, this patient still has his ulcer diathesis and the minute we relieve his obstruction he is again vulnerable to recurrent ulceration. One must be very careful in adopting the opinion that is still held by some surgeons that this type of stenosis can be permanently relieved by a simple short-circuit procedure. I would like to point out that in the stenosing ulcer, subtotal gastrectomy can be done with greater ease and safety than it is in the other types that we subject to radical operation. The reason the operation is easier is because the inflammatory reaction in the neighborhood of the duodenum has completely subsided, resulting in less difficulty in managing the duodenal stump.

The fourth group of ulcer patients that deserve surgical consideration is the so-called "intractable ulcer" group. By intractability we mean the type of patient that cannot take care of his ulcer and lead a normal life in the community. Many of these people with ulcers, which cause a great deal of discomfort or repeated bouts of hemorrhage, live satisfactorily so long as they take care of their ulcer, mainly by rest in bed. On the other hand, there are a certain number of them who are uncomfortable even when on a hospital regimen. Hinton, I think, has quite rightly pointed out that instead of calling these ulcers "intractable," one should use the term "per-

sistent pain." Undoubtedly this is a simpler manner of describing this group of patients. In other words, these individuals are never symptom-free; they have almost continuous pain, so that only by feeding or taking alkali every hour or two day and night can they have any comfort whatever.

The reason these ulcers are difficult to heal and to keep pain-free is usually the fact that they are deeply penetrating, and most of them are eroded into the pancreas. A good many of them, however, penetrate toward the liver and actually, on occasion, erode the common bile duct or the gall-bladder. It is wise to take into consideration the fact that these repeated bouts of activity, whether due to pain or hemorrhage, cause these individuals to have a definite fear of repeated attacks, or fear of what this pain means. Often such patients become problems that our best psychiatrists have difficulty in handling. If the surgeon accepts such a patient for cure, he has a real challenge. Not only must he have his patient survive the operation but he must have him pain-free, immune to further ulcers, able to carry on his job, and to lead a normal life.

We know that the only way we can accomplish this at the moment is by a radical subtotal gastrectomy. The ideal procedure is to take out all of the lesser curvature of the stomach, a portion of the fundus, the pylorus, and the first portion of the duodenum. If the ulcer is so placed that the first portion of the duodenum cannot be adequately included in the resection, one must then plan some method of removal of the antral mucosa.

The so-called Finsterer exclusion operation was at one time a popular one, since it made the operation safer and for the moment seemed to produce satisfactory results. Finsterer recognized early that many of the duodenal ulcers were in such a state of reaction and inflammatory extension that he considered them inoperable. In his earlier publication he suggested that, in addition to the distal two-thirds gastrectomy which he recommended, the mucosal cells from the antral segment of the stomach be removed before the antral stump was turned

in. Later he felt that this was not so important as was an extremely radical four-fifths or five-sixths type of resection. Many surgeons in this country and abroad adopted this operation for an ideal procedure in cases that presented technical difficulties. They soon found, however, that it was the best set-up for an anastomotic ulcer that we could produce. In 9 patients that I, personally, operated on by this method, 6 developed jejunal ulcer. The other 3 patients, as far as I know, are still symptom-free. I have used the Finsterer exclusion procedure, at the same time removing the antral mucosa, in approximately 30 patients, with just as good results as if I had been able to carry out the ideal operation. I realize that this group is too small to be sure the antral mucosa plays as important a role as I believe it does in the elimination of the ulcer tendency. If one is timid about removing the antral mucosa, one may resort to a two-stage operation with a clear conscience.

McKittrick has tried a group of two-stage procedures, doing the Finsterer exclusion subtotal gastrectomy as the first procedure, and then six weeks later deliberately removing the antrum and the first portion of the duodenum. This divides the operation, and undoubtedly at the second stage one finds that much of the inflammatory reaction noted at the first operation has subsided. His idea, which is perfectly sound, is that this divided attack brings the operation into the scope of the resident class of surgeons with much greater safety than a one-stage procedure. One should never, however, allow the patient, who will be so temporarily happy and relieved, or his physician to persuade you to leave the antral segment in place when the time has come to return to the hospital for its removal. If you do leave it there, a jejunal or an anastomotic ulcer is almost sure to occur. It is fair to say that in two instances of anastomotic ulcer in patients done elsewhere by this exclusion procedure, we have apparently cured the jejunal ulcer by the simple maneuver of removing the antral segment and the first portion of the duodenum.

The actual operative technic varies a good deal. I have found that in dealing with duodenal ulcer, one approaches the difficult part of the operation with greater facility if the greater curvature of the stomach is freed first and then the left gastric vessels secured and divided. The stomach is then transected high, including as much of the lesser curvature as possible, and then the distal segment, consisting of more than a half and usually as much as two-thirds of the stomach, is turned forward. In this way one can see the entire area of pathologic change from all directions and there is much less danger of injuring the vessels supplying the colon. Also, there is much less danger of injury to the portal vein, the hepatic artery, the common bile duct, and other structures that have a tendency to become drawn into the inflammatory reaction about the ulcer. It is extraordinary how, with experience, one may find this technic leads, in more than 90 per cent of the cases, to an ideal resection. This includes the ulcer portion of the duodenum. Occasionally the ulcer is so far down that one can transect the duodenum beyond the pylorus thus exclude the ulcer without leaving any of the stomach antrum in situ. We have reason to believe that this is a satisfactory method of handling these low-lying ulcers. It is necessary to visualize the structures in the portal fissure sufficiently so they are not jeopardized. One should never be content with less than three-quarters of an inch of duodenum for inversion. This should be true inversion, i.e., the serous surfaces should be approximated so that they face each other, since healing can only take place from the serosa. If one uses three rows of fine chromic catgut sutures on atraumatic needles, and gets inversion with all three, leakage will not occur.

I prefer the re-establishment of continuity between the proximal stomach segment and the jejunum by the posterior short-loop anastomosis, after the methods of Hofmeister and Polya. These cases, in my hands, have proven to be more satisfactory than the anticollic anastomosis that is so popular today. It is a little more difficult to do, but the anastomosis lies in a better

position, is more deeply placed within the abdomen, and is less likely to develop certain complications (such as small bowel obstruction, regurgitation of bile, etc.) than we have seen in our anticolic anastomoses. We do use an anticolic anastomosis when the mesentery of the transverse mesocolon is extremely fat, when there has been a previous operation through it, or if we are making the anastomosis following a very high resection for either recurrent ulcer or for malignant disease.

I have found that two rows of fine chromic catgut sutures on atraumatic needles, is satisfactory for the anastomosis; if these are properly placed, one need not fear postoperative hemorrhage or leakage. I do not believe that it is necessary to put in a third row or to use as the second row, an interrupted series of mattress sutures of silk or cotton. Actually, I feel that the fine catgut, which creates a little more reaction in the tissue, may be an advantage to the sealing of the serous surfaces. One should never use larger than zero chromic catgut. Often for the inner row, triple zero is satisfactory while double zero can be used for the outer layer. It is important, in doing the retrocolic anastomosis, to fix the rent in the transverse mesocolon high above the anastomosis to the stomach. This can be done to some advantage with interrupted cotton or silk sutures.

Most patients complain, during their convalescence, of the inlying nasal catheter which we either have to use for a few days continuously, or have to introduce two to three times in 24 hours postoperatively to insure the lack of dilatation of our proximal stomach segment. For over eighteen months now, I have used a No. 16 double-eyed Bardex catheter introduced through the jejunum 6 to 8 inches distal to the anastomosis, through the anastomosis into the stomach segment. This is brought out through a tiny stab wound and allowed to drain. After this has been instituted one can remove the Levine tube, the proximal segment is decompressed, and there is no danger of acute dilatation. We have used this method in 110 patients and have had minor complications in two. On removal

of the tube in these two instances, there obviously was a slight amount of leakage which caused rather severe discomfort, a little fever, and the need for the patient to be put back to bed for a few days. Both patients recovered. Most of them have no symptoms whatever from the removal of the tube on the twelfth day, and do not leak from it. The tiny stab wound through which the tube goes does become infected and is troublesome, but is a small price to pay for the benefit that one gets from this decompression.

J. Shelton Horsley, of Richmond, Va., for years has used a similar method of putting a tube through the stomach in his Billroth I type of operation, and is enthusiastic over this as an alternative to inlying nasal tube.

After patients have had a subtotal gastric resection for duodenal ulcer, they need to be followed carefully. They have some difficulty in gaining weight — often they go back to their "college weight" where they remain. Most of them can eat about what they choose; some find that they have to eliminate certain articles of diet because of distress. Most of them will take three meals a day, but for a while will take milk and crackers between meals and at bedtime. Almost never do they have to continue on a six-meal bland diet.

We have had a large experience in anastomotic ulcer following inadequate resections and gastro-enterostomies, an experience that comprises more than 75 patients. We know that two-thirds of these anastomotic ulcers will occur in the two years immediately following the first operation. It is a fact that occasionally an anastomotic ulcer will occur as long as 18 years after the first operation. The point that I am making is that now in a series comprising well over 200 subtotal gastrectomies for duodenal ulcer, we would expect to have a very considerable number of anastomotic ulcers, if it were going to be a common complication. As a matter of fact, we have not one single case of proven anastomotic ulcer following what we consider a proper operation for duodenal ulcer. We had a patient that developed an anastomotic ulcer

twice, who finally died of cancer of the pancreas. In other words, we were operating on him for duodenal ulcer when, as a matter of fact, his true difficulty was an ulcerative malignant lesion of the pancreas that had penetrated the duodenum. Unfortunately, he represents the one individual in our group with proven jejunal ulcer. We have had one patient who, after sixty pounds of weight-gain and a complete disregard of his diet and alcoholic intake, developed a massive hemorrhage and gastroscopy showed an erosion in the region of his anastomosis. This particular ulcer responded to conservative treatment. Another patient developed a perforation eight weeks after an ideal operation, which was thought at the time to be a jejunal ulcer. This latter patient later developed jaundice, from which he recovered. We do not know the exact cause of this situation; we know he is completely well at the moment. We do not believe that anastomotic ulcer of the type seen following gastro-enterostomy or inadequate resection does spontaneously get well, nor do we believe that it would respond as well as these patients have to palliative measures. It has been our experience that once an anastomotic ulcer occurs following an improper surgical operation on the stomach, it will persist or recur with such frequency that surgery must eventually be undertaken to relieve it.

Fortunately now, we see very rarely an anastomotic ulcer that has become fixed to the colon causing a penetration and producing one of the most serious surgical complications we know; i.e., gastrojejuno-colic fistula. The reason we are seeing so few of these patients now is because we probably have caught up with most of our inadequate operations, and the surgeons are aware, in our section of the country, of the importance of performing a more radical operation when dealing with the original problem than they had been doing previously.

Summary and Conclusions

1. Gastric ulcer is primarily a surgical problem.
2. The differential diagnosis between benign and malignant ulcer of the stomach is impossible in at least 10 per cent of patients.
3. Ulcers of the greater curvature and prepyloric regions of the stomach, and those of short duration in the older age group, should be immediately operated upon.
4. Small, acute ulcers on the lesser curvature or anterior or posterior walls of the stomach may be treated medically, but must be carefully followed.
5. The cure-rate of cancer of the stomach can be improved by following these rules.
6. The results of radical surgery for gastric ulcer are excellent, and the operative mortality rate is low.
7. Duodenal ulcer is primarily a medical problem.
8. Surgery is indicated in about 20 per cent of the cases.
9. Acute perforation accounts for about one-fourth of these and requires simple closure at the earliest possible moment.
10. Ulcer patients having blood loss, persistent symptoms on good medical treatment, and those with true scar tissue obstruction should be given the benefit of surgery. The best results are obtained by a removal of not less than half the distal stomach, pylorus, and first portion of the duodenum.

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PENICILLIN IN ACUTE AND CHRONIC INFECTIONS

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Penicillin is rapidly becoming established as a valuable addition to the physician's therapeutic armamentarium. Recent observations have confirmed the early reports of its effectiveness as a potent antibacterial agent and enthusiasm continues to mount.

Generally speaking, penicillin is effective against the gram positive organisms and the gram negative diplococci. It has no antibacterial effect on the gram negative bacilli. The pneumococcus, gonococcus, meningococcus, beta hemolytic streptococcus, streptococcus viridans and staphylococcus are susceptible to the action of the drug in the order named. The gas gangrene organisms, certain actinomycetes and the treponema pallidum have also been added to the list of sensitive organisms. The typhoid-dysentery-colon group, influenza bacillus, Friedlander's bacillus, *B. pyocyaneus*, *B. proteus*, Monila, tubercle bacillus, malarial parasites and viruses, have shown no response to the drug.

Penicillin is now being issued in vacuum ampules as the sodium salt which is hygroscopic, and unstable to heat and acids. It is very soluble in normal saline, distilled water or glucose solution and is usually made up in a ratio of 5,000 units per cc. of solution. Once made into solution, it loses its potency rapidly and should be used within 24-48 hours to get maximum effect. Both sodium salt and solution should be kept under refrigerative conditions, preferably not above 5°C. The calcium salt is more stable but has not had thorough trial at this time.

Penicillin can be administered intravenously, intramuscularly, intrathecally and locally. It cannot be given by mouth as it is destroyed by the acids of the stomach, or by rectum as it is poorly absorbed, as well as inactivated by the coliform bacteria. Due to rapid excretion by the kidneys, it should be given every 2 hours when the intravenous route is used, or every 3-4 hours when given intramuscularly. Maximum absorption is not obtained following subcutaneous administration; this method is not recommended at present. When administered systematically penicillin does not pass through the blood brain barrier into the spinal fluid in any appreciable amount. Therefore, in the treatment of meningitis, systemic therapy must be supplemented by intrathecal injection every 12-24 hours. The lumbar route is preferable unless a spinal canal block is present, in which event injection should be made into the cisterna magna.

The toxic manifestations have been few and those that have been observed have been mild. Since the present product is 70-80 per cent impure, it is felt that those reactions that have been seen are possibly due to the impurities. They consist of mild fever, chills, urticaria, significant eosinophilia, nausea, vomiting, diarrhea, thrombophlebitis, and in some cases burning pain at site of injection. None of these has caused any serious difficulty.

There is some difference of opinion as to the dosage, and various workers have advocated different schemes. I believe that it is best to give large doses early in the treatment since it has been shown that organisms, particularly the staphylococcus, may become "penicillin fast." The total amount required may vary from 100,000 units administered in five doses in treatment of gonorrhea, to 1,000,000-4,000,000 units as multiple doses in treatment of acute or chronic infections. Ordinarily 20,000 - 30,000 units are given as an initial dose intravenously followed by 15,000 - 25,000 units every 2 hours intravenously or every 3 to 4 hours intravenously. In fulminating infections, 25,000 - 75,000 units may be given initially intravenously, followed by

a continuous drip of 100,000 units per liter of normal saline solution, adjusted so that patient will receive 5,000 - 10,000 units per hour; 160,000 units a day usually is sufficient for most cases but 500,000 units may be indicated. Treatment should be continued until temperature has been normal for at least three days. Intrathecally penicillin is given in 5,000 - 10,000 unit doses every 24 hours, or in severe infections, every 12 hours until three negative smears and cultures have been obtained and fluid is clear. Doses above 10,000 units may be irritating.

Penicillin has been used locally with excellent results in concentrations of 250 - 500 units per cc. It is innocuous to tissues and, unlike the sulfonamides, retains its potency in the presence of pus. Local therapy has been of particular value in treatment of conjunctivitis, dacryocystitis, suppurating surface wounds, septic joints, empyema, chronic osteomyelitis and burns. In open wounds involving the superficial and soft tissues it has been used advantageously in the elimination of streptococci and staphylococci, thus permitting early secondary closure or skin grafting of the wound. It may be applied as wet dressings or injected through small rubber tubes inserted into the wound. The latter method is preferred as the penicillin can be applied two or three times a day without exposing the wound. Wounds with pure cultures of susceptible organisms would thus be protected from contamination with gram negative organisms which are not controlled by penicillin. Although local therapy is a useful adjunct to the therapy of deep seated infections such as osteomyelitis, it must be supplemented by systemic administration to effect a cure. Surface sterilization is of little value if bacteria remain in areas which the locally applied penicillin does not reach. Chronic draining sinus tracts or ducts must be irrigated with penicillin at least every 8-12 hours.

Penicillin is quite effective in sterilization of closed cavities such as empyemas and septic joints since the drug is retained in the cavity. In these cases the purulent exudate is aspirated and 25,000 - 50,000

units penicillin injected. Needless to say, the earlier the treatment is started the sooner the sepsis is controlled and the less likely will surgical drainage be necessary.

Penicillin has been used with most spectacular results in treatment of bacteremia, pneumonia, meningitis, cellulitis, osteomyelitis, gonorrhea and syphilis. Chronic infections respond well when due solely to susceptible organisms, but the non-susceptible pathogens, when also present, retard healing. In chronic osteomyelitis, adequate surgical treatment, including removal of sequestra and foreign bodies, is essential.

The treatment of specific infections should be individualized and each case treated by its requirements. Penicillin therapy should be accompanied by careful attention to such details as water balance, blood chlorides, serum protein levels, red blood count and hemoglobin estimations. Every effort must be made to keep body physiology on as normal a level as possible. General condition must never be neglected. Clinical judgment backed by sound medical and surgical principles should prevail, as penicillin is not a replacement for but an adjunct to these principles.

The following case reports illustrate the potency of penicillin as an antibacterial agent and show the spectacular results obtained from penicillin therapy in cases in which it is indicated.

REPORT OF CASES

Case 1: Beta hemolytic streptococic bacteremia. A white soldier, aged 37, admitted to Lawson General Hospital Jan. 21, 1943, had sustained compound, comminuted fractures of the proximal and distal thirds of the left tibia and fibula on Oct. 26, 1942, in an accident while on maneuvers. He was admitted to a nearby station hospital where he was treated by manipulation and plaster-of-paris immobilization. On admission to Lawson General Hospital, the Orr method of treatment was adopted. Immobilization in a plaster-of-paris cast was maintained until May 30, 1943, when union had progressed sufficiently to apply a brace. His condition was such that on July 8, 1943, he was granted a 30 day furlough, still wearing a brace at the time. On Aug. 4, he reported back to the hospital complaining of feverishness, pain and swelling of the leg. On his return trip he did not have a train reservation and stood up in a day coach for 18 hours. Examination revealed edema, hyperemia, tenderness and false motion about the proximal fracture site. His temperature was 100° F., pulse 100. He was put at bed rest and given sulfa-

diazine 3 Gm. orally, and 1 Gm. every 4 hours thereafter. The extremity was elevated and hot compresses applied. A blood culture was negative. On Aug. 6 he had a chill and developed a scarlatiniform rash, typical of a streptococcic infection—the so-called “surgical scarlet fever”. On Aug. 9 he had two chills, the latter followed by a temperature of 106°F. Blood culture was positive for beta hemolytic streptococcus. This occurred in the presence of a blood sulfadiazine level of 16.7 mg. per cent. Sulfadiazine was completely discontinued and penicillin was started with an initial dose of 30,000 units intravenously, followed by 5,000 units intravenously every 30 minutes for eight doses. Thereafter he received 20,000 units every 3 hours intramuscularly. Within 24 hours marked improvement was noted. Temperature returned to normal 72 hours after penicillin was started, but for safety therapy was continued for a total of nine days. He received 1,150,000 units in all. The blood culture was never positive after institution of penicillin. Concomitantly the leg became asymptomatic and all swelling and hyperemia disappeared. Thereafter his course was uneventful and he has since been discharged from the hospital.

Case 2: Chronic Osteomyelitis of Frontal bones. A white soldier, aged 27, admitted to Lawson General Hospital on Sept. 21, 1943, had had a chronic osteomyelitis of both frontal bones for about two years. He first began to have sinus trouble in the fall of 1941 and was hospitalized without beneficial effect. On Jan. 14, 1942, a sinusotomy was done and it was found that the outer table of both frontal sinuses was infected. Following the sinusotomy he continued to drain purulent material from each frontal sinus through sinus tracts just superior to the bridge of the nose. He had undergone 16 operations for removal of sequestra in an effort to cure the infection—all without success. On admission purulent drainage was sufficient to change the dressing 5-8 times daily. He had almost complete absence of sense of smell, and taste was impaired. A culture of the exudate revealed a pure culture of staphylococcus aureus. When assayed with penicillin this organism was found to be quite susceptible to the action of the drug. X-ray revealed no demonstrable sequestra. Penicillin therapy was started on Sept. 23, 1943, with an initial dose of 30,000 units intravenously followed by 25,000 units intravenously every 3 hours. This was supplemented by local irrigation of the two sinus tracts with penicillin (500 u cc.) twice daily. Within 48 hours the drainage had lessened considerably. Systemic therapy (25,000 units every 3 hours) was maintained for 12 days during which time he received a total of 2,205,000 units. Local therapy continued for 19 days. At the end of treatment there was no drainage and patient stated that he could actually smell for the first time in 21 months and that his sense of taste was greatly improved. Since this time he has had no recurrence of drainage, has been returned to duty and has no complaints.

Summary

1. Penicillin is a potent and valuable antibacterial agent. Most gram positive organisms and the gram negative diplococci are susceptible to its action.

2. Toxic manifestations from penicillin have been few and have caused no serious difficulty. Those observed are possibly due to impurities in the present preparation.
3. Methods of administration and dosage are discussed. It is felt that large doses are necessary initially to eliminate “penicillin fastness,” particularly in treatment of staphylococcic infections.
4. Body physiology should be maintained at as normal a level as possible in the treatment of infections. Sound medical and surgical principles should be practiced. Penicillin is an adjunct to, not a substitute for these principles.
5. Two cases are reported illustrating the dramatic effect of penicillin.

PSYCHOANALYSIS CHRIST VERSUS FREUD

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Savannah

Men of medicine: You, more than any other class, possess the cement of civilization, sympathy; you epitomize the span of human life by being first to greet the new arrival, by sympathizing or suffering with your patient, and by instilling hope at the journey's end.

In these ministrations of mercy you are both physician to the body and physician to the soul, for psychoanalysis is to resolve the soul into its component parts; a psychiatrist, a healer of the soul. Now, as healer of the soul you should formulate a prescription to make your patient a master craftsman in the art of living.

Is this accomplished by Freud's prescription? — that the ruling motive of the soul is sexual desire, the cement of civilization; that society is only the sublimation of sexual cravings, crystallizing it into a stable organization; that morality has set up a psychic censor for sexual repression causing a frustration of sexual desire, and as between sexual desire and sexual repression a fight ensues. They fight to a draw.

The referee decides that sexual desire has been consciously rejected, but unconsciously accepted, and from this unpopular decision the resulting confusion causes mental ill-health with pernicious repercussions in the body.

The cure: to think sex, talk sex, act sexy, till this unconsciously accepted sexual craving, the splinter in the subconscious, has been brought past the moral censor into consciousness; when, presto, the splinter in the brain has been removed. But, were this treatment effective the happiest people on earth would be the strumpets and whore-mongers whose moral censor has long since been washed away in a sewage of lust. To disprove this it is only necessary to visit any brothel, whoretel, hospital ward or lunatic asylum.

For this practice is a survival of pagan phallicism; when Friday, Frigg's day, was set apart for sexual orgies; when the worship of Ishta and the vulgar goddess Venus almost wrecked the Roman State; when promiscuity plunged humanity into medieval chaos;

"For on that sordid pagan world, the curse of
hades fell;

When deep disgust and sated lust made human
life a hell."

Yet, the emblem of pagan phallicism survives in the staff and coiled serpent of Aesculapius, in the caduceus, the emblem of Mercury a rascal whose very name was synonymous with cheat, thief, rogue, whose first emblem was the staff, labeled phallus. This phallus became the caduceus when Mercury presented Apollo with the gift of a lute and in return received two snakes to entwine on his phallus. Apollo, however, was not so generous to his son Aesculapius giving him only one snake to entwine on his phallus; yet this could be emblematic of Freud's soul analysis: the erect phallus representing sexual desire, and the entwined serpent sexual repression.

Such an analysis to the cheeks of a physician of the soul should bring a blush, the manifestation of human shame, for says Mark Twain, "man is the only animal who blushes, he is the only one who needs to."

But, far different from this phallic soul is the soul of that physician philosopher of Galilee, for in the nebulous birth of the human race man has thought the soul was ruled by the sex glands, by the heart, by the head before realizing it had any connection with a Divine Will. From this debased phallic condition the soul was emancipated by Greek philosophy for the platonic soul has three dominating motives: first, those ruled by desire located in the loin; fundamentally sexual "these souls are restless, acquisitive beings absorbed in material quests and quarrels, who burn with the lust of luxuries and who rate their gains as naught compared with an ever-receding goal: these are the men who dominate and manipulate industry. Then there are the souls ruled by emotion, situated in the heart, in the force and flow of blood, the organic resonance of experience: they are pugnacious rather than acquisitive, their pride is in power rather than in possession, their joy in battle rather than in the marts of trade. And lastly, are those souls whose delight is neither in trade nor battle but in understanding; who yearn not for goods, not for victory, but for knowledge; who leave both the marts of trade and the ceaseless strife of humanity to lose themselves in the quiet clarity of secluded thought."

With this intimate observation of human behavior Plato emancipates the soul from the quagmire of sex to formulate a soul of the loin, a soul of the heart and a soul of the head.

From the soul of Plato it is a natural sequence to the soul of Spinoza in which reason rules desire and thought controls emotion: for says Spinoza there are only three primary emotions; pleasure, pain, desire — all of the countless varieties of feelings in all their variation and shades are but mixtures and blends of pleasure, pain, desire. Yet, uncontrolled, desire runs ruthlessly riot for desire is a motorized machine bounding down the highway of life controlled only by the green light of pleasure and the red light of pain, for it has no objective, no definite purpose, to ultimate destination. It plunges here, there whirling about continually and knows not whither

it is bound, for the machine lacks a driver. Supply the experienced driver thought, and at once a course is chosen to avoid most of the red lights of pain, and the highway selected lined with the green lights of pleasure to assure a pleasant journey.

To epitomize the philosophies: thinkers should rule, says Plato, thought should rule desire, says Spinoza; but Christian philosophy says that you should rule your thoughts which in turn will control desire. And though the chief concern of Greek philosophy is ruling others, the chief concern of Christian philosophy is ruling yourself.

For the thing that really matters is what you are thinking the while; and both sin and grace are inward matters, the cumulative effect of a train of thoughts. For thoughts are things indelibly recorded, and figuratively, thoughts are the fiber to be spun into the thread of ideas which in turn are woven into the fabric of beliefs. It is this fabric which holds you to a definite rule of conduct and binds you in that narrow groove worn by your sense of right and wrong.

To use another metaphor: thought is the sculptor that so models the plastic material of the body as to show in the features of its masterpiece whether the soul is that of a Madonna, or that of a Mephisto.

To use still another metaphor: Thoughts are the building blocks with which the temple of the soul is constructed, the foundation laid during infancy and childhood, and the superstructure built during adolescence and maturity; as is the foundation so is the stability of the edifice. For unstable is the temple whose foundation is the muck and slime of sex. Would you build a firm foundation? Then build with the thoughts of love; which, says Spinoza, is pleasure whose source of origin is external to the body, divorcing it from selfishness. Almost could love be defined as unselfish pleasure. Such a foundation even may be likened to the man who built his foundation on a rock, and when the winds of adversity blow and beat upon it, and the storms of doubts and fear rage, it is still

unshaken because its foundation is firm and built upon a rock.

And so let the physician, the natural philosopher, the lover of wisdom and nature; who humbly assists nature as the Will of God dedicate himself to unselfish pleasure which works for righteousness. Let him put away those vile thoughts of sex; for, says Isaiah, the vile person will speak villiany, and his heart will work iniquity, to practice hypocrisy, to make empty and desolate the temple of the soul, to make it the joy of wild asses and tame jackasses. Supplant these vile thoughts with those pleasantly unselfish which work for righteousness; for the work of righteousness shall be peace and the effects of righteousness quietness and assurance. And, says Isaiah, the inhabitants shall not say "I am sick"; the people that dwell therein shall be forgiven their iniquity.

So bless the Lord who forgiveth all thy iniquities; who healeth all thy diseases: yet strange it is that we who dedicate ourselves to the healing art should forsake the Divine Healer to follow after strange gods; and that we who possess the most compassion should desert the sign of the Prince of Compassion to practice under the emblem denoting cheat, thief, rogue; and that we, while endeavoring to alleviate human misery, should renounce the rational therapy of that Physician who wrote the only perfect prescription for human happiness.

For written in this prescription is a prohibition, "even to look upon a woman to lust after her is to commit adultery with her already in the heart." Why this prohibition? Because sex is instinctive and needs no thought. To clarify, let us dissect this marionette maniken — man — to demonstrate some of his inner workings; he is operated by invisible strings which we as physicians call reflex acts: the pulls or reflexes implanted at birth are instincts; those implanted after birth we call reason. Instinct and reason cause the marionette to strut his stuff, and although instinct has no choice, reason has the power to choose its response to sensory stimuli and a chosen act oft repeated becomes a habit.

In this marionette what we call "mind"

comprises all the psychic functions of the entire nervous system throughout all its ramifications, and both mind and body, says Spinoza, are one and the same seen inwardly as mind, outwardly as matter; an inextricable mixture because the decisions of the mind transformed into the desires and determinations of the body form one integrated, coordinated whole, and also are fused the functions of the mind, because intellect is only a series of ideas; will a series of actions: intellect and will are the same as will is only an idea that has been transformed into action. Every thought would be transformed into action were it not hindered by another thought: to think is response delayed until every vital angle of a problem has aroused correlative action.

We can choose our thoughts but not our instincts, as an instinct is a device developed by nature for the preservation of the individual or of the race; it blindly seeks its own fulfilment and subordinates the whole to the aggrandizement of a part, differing from reason in as much as reason is a systematic plan, thought out, coordinating all vital functions to the good of the whole.

Reason is order — an adequate idea — in contradistinction to passion which is an inadequate idea. Were all men reasonable there would be no need for law; but passion, an ancestral torrent of impulse and feeling makes them but an appendage of lust, greed, temper and rage subordinating the whole to the part which is the ruling passion. Reason implies something thought out and closely related are reason, ratio, ration: a ration card represents a scheme to provide for all; a passion card would be for greed, lust, hoggishness in a few to grab all, the rest pathetically suffering. Phallic physicians want, not a ration card, but a passion card.

But we digress from the dissection of our marionette: in this maniken what we call brain is mainly a transformer on a reflex arc, to transform incoming sensory currents into outgoing motor currents; and to transform ideas into outgoing motor currents for volition. The functions of the

brain are predominantly reflex and the more so they are the healthier the individual "for the man who breathes most healthily is least conscious of his breathing."

The one faculty that differentiates this marionette is the supreme development of thought; he has the ability, whatever the trend of thought, to break the continuity and to think of something else, to choose his thoughts, and the thing that really matters is what he is thinking the while: for to reiterated, associated, beneficent thought all education is due.

For figuratively education is like using thought as a boring tool to tunnel through a mountain leading out to the way that is best and noblest, furnishing an avenue for the intercommunication of thought, and an orderly passage for those motor vehicles of nervous energy, preventing traffic jams with their resulting confusion and irritation; but thought may tunnel to an inferno where dwells the "frightful monster vice," especially if that monster is garbed in the alluring habiliments of sex.

For sex is instinctive, and it is the nature of an instinct to require no thought: for instinctively the spider spins a complicated web, as well the first time as he ever does; instinctively on the first trial the bee builds a geometric pattern in her hive; instinctively the wasp finds the exact spot to permanently paralyze a spider without causing death; instinctively the king salmon, for nearly nine months, for almost a thousand miles frantically fights the current of the Columbia River, eating nothing, becoming discolored, worn, distorted and when at last the eggs are fertilized both male and female drift helplessly, tail foremost down stream never to survive the trip.

And instinctively the hen lays an egg, a feat you could not accomplish with any amount of thought or education; instinctively in due time the male sex gland will grow a beard, but no amount of thought or education will ever induce it to produce milk in the breast; and instinctively without one thought concerning sex you will do a better job on the first trial than you will after thirty years of practice. For sex is instinctive, and in thinking sex, talk-

(Continued on pag 257)

THE PRESIDENT'S PAGE

THE NATIONAL PHYSICIANS' COMMITTEE FOR EMERGENCY MEDICAL SERVICE

For two decades there has been nationwide propaganda in America against the American system of medical care, and favoring a federalized regimentation of the medical profession. We recall how outraged and helpless we felt at each new insult, and wondered if anything could be done to combat the persistent and vicious trend. Also, we wondered why something wasn't being done. Well, the N.P.C. was formed in 1939 by American doctors to do something about it. This is our committee and it is making our fight against socialized medicine, which is not in the best interest of the public. The N.P.C. is endorsed by the A.M.A., but is not accountable to it; and it is composed of leading men of the American medical profession. Dr. Edward H. Carey, of Dallas, Texas, a former president of the A.M.A., is president of its board of trustees.

The N.P.C. has accomplished several things worth while, of which three are outstanding: First, in 1942 the Supreme Court had declared the activities of the A.M.A. commerce and trade. Through the efforts of N.P.C., out of 435 congressmen elected, 300 had been pledged to preserve the professional status of physicians, to oppose compulsory health insurance, and to avoid sacrificing the doctor-patient relationship. Second, in June, 1943, the Wagner-Murray-Dingell bill was introduced in Congress. N.P.C. got busy and one of the greatest advocates of federalized medicine in America complained: "The N.P.C. is responsible for the most widely-circulated pamphlet ever published in the U. S. A., fifteen million copies of this single pamphlet have already been distributed; millions more are rolling off the press. This pamphlet is the source and fountain-head of most of the propaganda against the Wagner-Murray-Dingell bill flooding the nation today. It supplies the chief arguments drummed into the medical journals, and pounded into the public ear from the lecture platform, the press and the radio." As a result of the

combined efforts of N.P.C. and other groups it has become a practical impossibility to pass this bill. Third, N. P. C. has not only pointed out the defects in a federalized, regimented, socialized medical service for the American people, it has also stressed that under the American system of medical care the American people have the best and most widely distributed medical service of any comparable number of people in the world. What is needed is to devise ways and means for its universal distribution to the sick man on a basis he can afford.

Socially and economically the whole world is in a state of flux, and the future of every practicing physician and every medical student is involved. The fight to avoid federalized, socialized, regimented medicine is not going to be short and easy. The N.P.C. is our army doing our fighting and they are entitled to our cooperation and financial support. This is a privilege every Georgia doctor should avail himself of immediately. Our doctors in the armed forces expect to return to the American system of medical practice; and it is our duty to see to it that it shall be unchanged.

Dr. Herman L. Kretschmer, president of the A.M.A., said: "I regret the lack of physicians' interest in this committee, as revealed by the report just issued. This report disclosed that only 6,227 individual physicians made contributions during the past year supporting the committee." The report from Georgia discloses the amazing fact that only 56 physicians in Georgia—out of 2,841—contributed to the N.P.C. in 1943. Again, this is our committee; it is making our fight and it is entitled to our support in the same measure that we feel the urge for the preservation of the American system of medical care.

Undoubtedly our seeming indifference and lack of support for N.P.C. is due to an oversight. Contributions may be sent direct or through the secretary of your county medical society. It is our privilege to support our own best interests and that of the patient—let us do exactly that.

CLEVELAND THOMPSON, M.D.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

AUGUST, 1944

**THE WOMEN'S FIELD ARMY IN
GEORGIA**

In response to the urgent demand for popular education in cancer control by the leading surgical and gynecological societies of America, the American Society for the Control of Cancer was organized in 1913. In this movement Dr. George R. White of Savannah, was a prominent figure. The work of the new society was progressive, but it was unable to meet the rising educational demands necessary to induce the public to seek medical advice for early diagnosis and treatment of cancer.

Statistics showed that a little more than 60 per cent of all cancers occur in women. It was therefore decided to organize a woman's department of the society. Accordingly, this branch of service came into being in 1936 under the name of the "Women's Field Army of the American Society for the Control of Cancer." The name is long and cumbersome, but it has served well. However, there is now a movement on foot to shorten the name of both the society and the women's branch.

The Women's Field Army came into Georgia in the spring of 1937 under auspicious circumstances. A most favorable sentiment for cancer control had been developed in the State by the Medical Association of Georgia, through the work of its Cancer Commission. Also, there was a cancer control bill, which had already received the approval of the Committee on Hygiene and Sanitation of the lower branch of the Legislature. As soon as the Field Army was firmly installed its first work was to secure the influence of the Georgia Federation of Women's Clubs behind the effort to pass the Cancer Control Bill. The bill became law in March, 1937, making Georgia the fifth state in the union to provide diagnosis and treatment for its indigent cancer patients.

The Women's Field Army works directly with the Cancer Commission of the Medical Association of Georgia. It is under the control of a state commander and there is a vice-commander for each congressional district. These act as cabinet members and, in consultation with the state commander, appoint county captains, who in turn select as many associates as may be required. Together these women conduct a campaign of education and enlistment in their respective spheres of influence.

In the beginning great difficulty was experienced in getting a county organized, but at the present time the Field Army has a representative in every county in the State and nearly all of the 159 counties are thoroughly organized. It was not until 1944 that the army was able to reach its enlistment quota of 1 per cent of the State's population. However, at this time they not only went "over the top," but in seven counties raised about \$20,000 in excess of the quota. This sum will be used for improvement of the state-aid clinics, for the purchase of new equipment, and so forth. In Fulton County \$1,000 has been appropriated to the Home for Incurable Cancer of Our Lady of Perpetual Help.

The Field Army plans for the immediate future show vigor and healthy expansion. A state-wide office will be opened in Atlanta with a permanent secretary working part-time daily. Here information regarding any phase of cancer control may be obtained. A course in cancer control is being prepared as a part of the science curriculum in the state schools. Pamphlets in the form of reprints will be furnished to twelve or fifteen thousand students in these grades, and to every doctor in Georgia. In addition, every teacher will be given a kit containing the best reference books obtainable, such as "Youth Looks at Cancer" and "Cancer: A Study for Laymen," together with charts and posters. This project is expected to cost a little more than \$2,000.

During the 1944 campaign approximately 500,000 pieces of cancer literature were distributed. This was far from adequate to meet the demands, which is proof of

the changing attitude of the people of Georgia toward cancer education. The demand for literature is constantly increasing. Next year we hope to double the amount of literature distributed and to more than double the 10,000 posters, radio scripts and transcriptions prepared this year. The cost of these activities will be from \$2,500 to \$3,000.

Another part of the year's program includes a larger number of talks for lay audiences by volunteer members of the medical profession. Last year three cancer institutes were held in Georgia: one each in Savannah, Augusta, and Atlanta. All were well attended. The expense of these was borne by the Women's Field Army. It is planned that during the fall of this year some of the most outstanding cancer students of the country shall be brought to Georgia to conduct a series of lectures and clinics in various parts of the State.

In the past year a little more than \$700 was spent transporting patients who had no means of getting to and from their nearest state-aid cancer clinic. This service has to be approved by the county welfare department. It will be continued.

The Field Army is gratified that it has been invited to become an affiliate of the Georgia Conference of Social Agencies. This association will still further broaden the work of the army.

It is encouraging to those who have worked so hard for cancer control to learn that there has been, since 1941, a steady decline in cancer deaths and death rates in Georgia. The percentage of decrease is not large, but every little is helpful.

We want to thank the newspapers of Georgia for the splendid help they have given. Without proper publicity any educational campaign must of necessity fail.

The Women's Field Army and all others working for cancer control have a three-fold objective:

1. An educational campaign in every community in the State;
2. An annual physical examination by every adult in the State;
3. Prompt and proper treatment for any

condition revealed by the examination.

In the last two years the increasing interest in cancer control by the people of Georgia gives hope that these objectives may be realized — that our citizens may have dangerous physical defects discovered, treated, and cured while they are in a latent and painless stage.

J. L. CAMPBELL, M.D.,
Chairman, Executive Committee,
 Georgia Division of the
 Women's Field Army.

PSYCHOANALYSIS CHRIST VERSUS FREUD

(Continued from page 254)

ing sex and acting sex; phallic physicians confound fundamental facts; they rewrite the laws of nature. And when, "O mighty man you teach Omnipotence to rule, why not be yourself, be a fool."

And although beneficent thought is the mother of education, malignant thought is spued into the brain from the craters of hell to vitiate the vitality, the vigor, the virility and the vim of its victim.

And although thought transformed into action, volition is the supreme achievement of man but even in this the true Christian is an automaton, because the summation of Christian prayer throughout all ages is "flat voluntas Tua." Thy will be done, not my will, but Thy will through me: and so, above all else give me enthusiasm, which etymologically is *ENERGY FROM GOD*.

OUR CONCERN — EVERY CHILD

The publication, *Our Concern — Every Child*, is intended to serve as a guide for the study of State and community resources and action needed to safeguard childhood and provide opportunities for youth. It includes discussion of goals of a long-range child-welfare program, safeguards for children in wartime, and post-war objectives; outlines for the review of State and community conditions and services affecting children; and a suggested outline for an inventory of community resources.

The publication is available upon request, free of charge to persons or organizations that have specific use for it in developing services for children or studying child-welfare problems of the war and post-war periods. Copies may be purchased for 15 cents a copy, or at a discount of 25 per cent in quantities of 100 or more, from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

GEORGIA STATE-AID CANCER PROGRAM

The Georgia State-aid program for indigent cancer patients has been in operation since November, 1937. Up to Dec. 31, 1943, a total of 9,440 patients reported to the clinics for diagnosis and treatment. Of this number, 5,840 were found to have cancer.

The great majority of the cancer patients who have reported to the clinics thus far have been found to have lesions involving sites which are readily accessible; namely, the skin, buccal cavity, breast and uterus. On the whole, these are the lesions which are most amenable to treatment when diagnosed early in the course of the disease. Such lesions comprise approximately 85 per cent of all cancers seen in the clinics.

The experience in Georgia with respect to the frequency with which various types of lesions are encountered differs materially from that observed in most clinics in northern areas of the United States. Some lesions are encountered much more frequently in Georgia and others much less commonly. Perhaps the greatest variation is noted with respect to cancer of the skin. In Connecticut, for example, less than 10 per cent of all clinic patients are found to have lesions involving the skin. In Georgia, on the other hand, skin cancers comprise close to 50 per cent of all malignancies seen in the clinics. These observed differences are in agreement with surveys made by the United States Public Health Service which showed skin cancer to be 4-5 times as prevalent in the South as in the North.

The increased prevalence of skin cancer in the South may, of course, be readily explained on the basis of greater exposure to sunlight and weather. The relationship of sunlight to skin cancer may be shown by noting the frequency with which such lesions occur with respect to site, occupation and race. Of the 2,678 patients with skin cancer who reported to the Georgia state-aid clinics during the period 1937-43, approximately 93 per cent were found to

have lesions involving the exposed surfaces; namely, the face, neck and hands. Moreover, such lesions were observed much more commonly among farmers and others whose occupation was of a type which necessitated prolonged exposure to sunlight. With respect to race, skin cancers were observed in 2,628 white patients as compared with 50 colored patients.

Although differences in the prevalence of skin cancer in various geographic areas can be shown to be related to sunlight and weather, there are substantial variations in the incidence of other types of lesions which are not easily explained. In the table below, a comparison is made between the clinic patients in Georgia and those in Connecticut with respect to the frequency with which certain types of cancer are observed. The figures represent percentages and show the ratio of each type to the total cases seen. Skin cancers are not included.

FREQUENCY WITH WHICH CERTAIN TYPES OF
CANCER ARE OBSERVED IN GEORGIA
AND CONNECTICUT CLINICS

Site of Lesion	GEORGIA (Per Cent of Total Cases)	CONNECTICUT (Per Cent of Total Cases)
Lower lip	9.1	1.8
Mouth	6.2	2.9
Stomach	1.8	9.9
Colon	1.5	12.0
Rectum	1.9	7.1
Uterus	36.0	10.6
Breast	19.8	19.6
Respiratory system	2.2	6.3
Prostate	2.5	3.0
All others (except skin)....	20.0	26.8
Total.....	100.0	100.0

Although figures based on relative percentages may be misleading, the above table shows quite definitely that lesions involving certain sites such as the lower lip, mouth and uterus are encountered more frequently in Georgia than in Connecticut. On the other hand, cancers of the intestinal tract have been observed much more commonly in Connecticut. The marked variation in the incidence of cancer of the lower lip

is probably related, in part, to differences in exposure to sunlight. With respect to other sites, however, the reasons for the observed differences in incidence are not apparent.

Since the clinic patients in Georgia are drawn from the lower economic groups, and since persons of low economic status are not in a position ordinarily to finance expensive diagnostic procedures, it has been suggested that, perhaps, many patients with internal cancers fail to reach the clinics. If true, this would help to explain the high proportion of easily accessible cancers seen in the clinics and the low proportion of internal cancers. On the other hand, the state-aid program has been in operation for more than 6 years and during that period diagnostic services for all types of cancer patients have been available at the clinics.

If, in the past, many internal cancers among persons in the low income groups escaped detection, it might reasonably be expected that an increasing number of such cases would report to the clinics each year. This has not been the case. The number of internal cancers involving the digestive tract and other sites has remained about the same year after year.

If real differences do exist with respect to the incidence of certain types of cancer in different geographic areas, such information may be of value for study purposes. Investigation may lead to the discovery of groups which are exposed to increased risk of developing cancer. This, in turn, may lead to the discovery of factors associated with the development of the disease.

W. J. MURPHY, M.D., *Director*
Cancer Control Service.

MEMBERS REGISTERED AT THE NINETY - FOURTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION Chicago, June 12 13, 14, 15, 16, 1944

Abreau, B. E., Augusta
Allen, Eustace A., Atlanta
Auston, Paul W., West Point
Aven, Carl C., Atlanta
Barnett, Crawford F., Atlanta
Brawner, Jas. N., Atlanta
Bunce, Allen H., Atlanta
Buyers, Edgar S., Norristown
Camp, R. T., Fairburn
Cantor, I. B., Atlanta
Chappell, Amey, Atlanta
Collier, Thos. J., Atlanta
Curtis, Walker L., College Park
Daniel, Chas. H., College Park
Davidson, Major Marion T.,
Fort Benning
Davison, Hal M., Atlanta
Ehrlich, M. A., Bainbridge
Elliott, Clifford C., Sargent
Fancher, J. K., Atlanta
Farber, Marian E., Valdosta
Farmer, C. Hall, Macon
Foster, Maude E., Atlanta

Fountain, Jas. A., Macon
French, Col. S. W., Atlanta
Fuller, Geo. W., Atlanta
Giddings, Glenville, Atlanta
Greenblatt, Robert B., Augusta
Greene, Edgar H., Atlanta
Hall, Samuel J., Savannah
Halpin, Lawrence J., Atlanta
Harrell, Henry P., Augusta
Harris, Bryce W., Trion
Kenyon, Steve P., Dawson
Kolmer, 1st Lt. David N.,
Ft. McPherson
Lamm, J. H., Atlanta
Lapides, Leon, Columbus
Lowance, Mason I., Atlanta
Martin, L. W., Camp Stewart
Mass, Max, Macon
Minor, Henry W., Atlanta
Mulherin, Wm. A., Augusta
Parham, L. G., Atlanta
Patterson, J. C., Cuthbert

Paullin, Jas. E., Atlanta
Pruitt, M. C., Atlanta
Reiffer, Capt. Reuben M.,
Turner Field
Roberts, Chas. W., Atlanta
Rudolph, Capt. Jack A., Augusta
Rushin, Chas. E., Atlanta
Sauls, H. C., Atlanta
Selman, W. A., Atlanta
Shanks, Edgar D., Atlanta
Shulack, Major Norman R.,
Fort Benning
Thomas, W. C., Brunswick
Thompson, Cleveland, Millen
Torpin, Richard, Augusta
Volpitta, P. P., Augusta
Watson, Edwin R., Atlanta
Weaver, Olin H., Macon
Weitz, Frank, Atlanta
Williams, Norton L., Rome
Woodbury, R. A., Augusta
Yampolsky, Joseph, Atlanta

HOSPITALS DESIRE SHARE OF SURPLUS COMMODITIES

Because voluntary non-profit hospitals of the country are caring for a major share of patients admitted in all hospitals this year, a resolution has been passed by the American Hospital Association, to which a majority of non-profit hospitals belong, asking that the same priority now granted state, county, and other taxed institutions now obtaining surplus commodities, be given voluntary hospitals also. The resolution is being

sent to the surplus war property administrator, William L. Clayton.

Other reasons set forth by the American Hospital Association in seeking the priority include the fact that voluntary hospitals are community organizations serving the people without profit; that where any excess funds are available they are spent in the further improvement of facilities for care of the sick; that while assets of such hospitals are not governmentally owned, they are saving each community thousands of dollars annually by providing service to all classes of citizens.

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

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President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone Walnut 8911; residence, VERNON 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone Walnut 8911; residence, Jackson 7979.

NURSING SERVICE OF THE VETERANS ADMINISTRATION

The hospital service of the Veterans Administration is composed of 94 hospitals, with a total of 70,113 beds as of Jan. 1, 1944. This number is capable of expansion. The hospitals of the Veterans Administration are classified in three groups, according to the clinical types of patients for which they were originally designed; namely, those caring for general medical and surgical, those caring for tuberculous, and those caring for neuro-psychiatric patients. Nevertheless, some of these hospitals have a mixed service; that is, general and tuberculous patients, or general and neuropsychiatric; and all hospitals are equipped to admit emergency ill patients of any type. These hospitals have been established for the care and treatment of all honorably discharged men and women of all wars in which this country has been engaged.

Nurses in the Veterans Administration are appointed under the regulations of the United States Civil Service Commission, and the requirements for general staff duty are as follows:

Applicants must have successfully completed a full course in a recognized school of nursing requiring a residence of at least two years in (a) a hospital having a daily average of 50 bed patients or more; or (b) a hospital having a daily average of not less than 30 bed patients where the course includes not less than six months' resident affiliation with a general hospital having a daily average of not less than 75 bed patients, or where the graduate has successfully completed a resident post-graduate course of not less than six months' duration is general nursing in a hospital having a daily average of not less than 75 bed patients.

In a few Veterans Administration hospitals it has been found practicable to assign part-time nurses to assist with the bedside care of patients.

All appointments to the Nursing Service of the Veterans Administration are War Service Appointments, and will be for the duration of the war and six months thereafter.

During the coming year it is expected that the need for nurses in Veterans Administration facilities will increase greatly due to the anticipated large number of applications for hospital treat-

ment that is expected from men and women potentially entitled, because of military or naval service in the present war. With the great augmentation of persons who will be entitled to hospitalization by the Veterans Administration because of military or naval service in the World War II, the construction program for new facilities and alteration of existing facilities has been accelerated; in addition several thousand beds in the hospitals for neuropsychiatric and tuberculous beneficiaries are planned for early completion.

Living quarters are available at most of the facilities of the Veterans Administration; however, nurses are not required to live on the stations. Promotions from the lower to the higher grades are made within the service, and are based on efficiency and length of service. All nurses are expected to serve wherever their service are needed. Orientation courses are given to all nurses entering the service of the Veterans Administration. These courses are planned to adjust the nurses to all the activities of Veterans Administration hospitals. Since war was declared it has been very difficult to retain and recruit qualified registered nurses. It is planned to accept U. S. Senior Cadet Corps Students in Veterans Administration facilities that are approved by the State Board of Nurse Examiners, and three Veterans Hospitals are now accepting student nurses for affiliate courses. *Hours*—8-hour day—rotating shifts. *Salary*—\$1800 per annum, plus overtime. Deduction of \$480 per annum for quarters and subsistence if the nurse resides on the station, or deduction of \$109.80 for one meal per day if she resides off the station. Deduction of 5 per cent for retirement.

WHERE TO APPLY—Medical Director, Veterans Administration, Washington, D. C., or to the Manager of the nearest Veterans Administration Facility.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

WOMAN'S AUXILIARY : OFFICERS 1944-45

President—Mrs. W. T. Randolph, Winder.

President-Elect—Mrs. Lucius N. Todd, R. F. D. No. 2, Augusta.

First Vice-President—Mrs. Edgar H. Greene, 1442 Wesley Road, Atlanta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Leonard Massengale, Lumpkin.

Recording Secretary—Mrs. Charles Usher, 6 East Liberty St., Savannah.

Corresponding Secretary—Mrs. Alex Russell, Winder.

Treasurer—Mrs. Ralph Fowler, Marietta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. Charles Daniel, College Park.

ACTIVITIES AND NEWS ITEMS

Mrs. Olin S. Cofer, of Atlanta, retiring president of the Woman's Auxiliary to the Medical Association of Georgia, submitted an excellent report of the organization's activities at the recent state convention, held in Savannah. The group had as the theme for its year's work, "Health For Defense," and its various activities stressed this important idea.

Mrs. Cofer stated that members of the county auxiliaries which compose the state organization had given 163,178 hours to war service during the fiscal year; had made 28,283 surgical dressings; 2,018 cancer bandages and 12,830 sewed and knitted articles. A total of 32,320 leaflets on *Health* was distributed and 46 health programs were given for members and public. Continuing to stress health, members presented 48 radio programs during the year and showed 46 health films to a large number of Georgians.

The health education program as sponsored by the Auxiliary featured the following subjects: Nutrition, Cancer, Tuberculosis, Venereal Diseases and Child Guidance. Equipment for showing films on these subjects was recently purchased by the Medical Association of Georgia and films from the fine library maintained by the Georgia Department of Health have been available. Members gave 9,948 hours to this work. A total of 236 subscriptions to *Hygeia* was secured and these were given to libraries, schools, army recreation centers and others were placed by doctors and dentists in their offices.

Members of the Auxiliary in and near service camp areas have welcomed the wives of doctors in the service and have sought to keep them interested in auxiliary work. The doctors and their wives have been entertained by members personally or by their organizations in an effort to make them feel welcome in the community.

According to Mrs. Cofer's report, the Auxiliary was very active in public relations work. Groups participated in all branches of war activities and promoted health education programs among Parent-Teacher Associations, Women's Clubs, etc., stressing nutrition. Emphasis was placed on war services in cooperation with lay groups. The Doctors' Aide Corps of the Woman's Auxiliary to the Fulton County Medical Society

has received nation-wide recognition and has typed the blood of 9,248 persons.

Members have made informative talks on the Wagner-Murray-Dingell bill and have studied other legislative measures concerning medicine and health. The state group has held programs on Jane Todd Crawford and Research in Romance of Medicine and has observed Doctors' Day.

Mrs. Cofer, during her regime as president, represented the Woman's Auxiliary to the Medical Association of Georgia at the annual convention of the Woman's Auxiliary to the American Medical Association and attended most of the district meetings held in the State during the year.

BALDWIN COUNTY

The Baldwin County Auxiliary had the first meeting of 1944-45 with Mrs. Edwin and Mrs. H. D. Allen, hostesses June 12. Twelve members were present, including one new member, Mrs. John Anderson. Highlights of the State meeting in Savannah were given by the president, Mrs. Sam Anderson, and the delegates, Mrs. Y. H. Yarbrough and Mrs. Charles Fulghum. Exhibited at this meeting was the scrapbook that won the state award. It was compiled by Mrs. E. Y. Walker and dedicated to the physicians serving in the armed forces. Also the charts made by Mrs. Otis Wood, picturing the activities of the Auxiliary, a broad road leading to Victory. Into this road the smaller roads of the different activities flowed. It was voted to give the charts to the Hardwick Public School, also to buy two \$25.00 bonds with the reserve fund. The plans for 1944-45 follow the state plans together with any needed local activity.

SAVANNAH

The June meeting of the Woman's Auxiliary to the Georgia Medical Society was held at the home of Mrs. R. L. Neville, 27 E. 49th St. At this time a report of the recent state convention was given. Co-hostesses with Mrs. Neville were Mrs. E. T. Upton, Mrs. E. N. Maner and Mrs. E. N. Gleaton.

Mrs. S. Elliott Wilson was elected as president of the Woman's Auxiliary to the Georgia Medical Society, succeeding Mrs. R. V. Martin. Mrs. E. C. Demmond was chosen as president-elect.

Standing committee chairmen were also elect-

ed and are as follows:

First Vice-President and Chairman of Programs—Mrs. H. M. Kandel.

Second Vice-President and Chairman of Health Education—Mrs. E. Ham.

Corresponding Secretary and Chairman of Hospitality—Mrs. E. R. Graham.

Recording Secretary and Chairman of Publicity—Mrs. G. H. Johnson, Jr.

Hygeia—Mrs. William R. Dancy.

Finance and Budget—Mrs. Charles Usher.

Public Relations and War Participation—Mrs. John Elliott.

Doctors' Day—Mrs. S. F. Rosen.

Scrapbook—Mrs. R. L. Neville.

Exhibitions—Mrs. Lee Howard.

Chairman of Research and Romance in Medicine and Jane Todd Crawford Memorial—Mrs. R. V. Martin.

Reports of the State convention were received.

Hostesses for next season's meetings will be: Mrs. Ralston Lattimore, October; Mrs. J. K. Quattlebaum, November; Mrs. G. H. Lang, January; Mrs. E. C. Demmond, February; Mrs. R. L. Neville, April; Mrs. Lee Howard, June.

NEWS ITEMS

Dr. M. A. Fort, Bainbridge, Decatur County Commissioner of Health, has just published a bulletin, title as follows: "HOWDY, Bulletin of Decatur County Board of Health for July 1944." Subjects discussed are: "Rabies, Vis Medicatrix Taturae, My Abnormal Baby, Infantile Paralysis and Typhus (Brill's) Fever." It was written in attractive style and easily understood. The Decatur County Board of Health has remodeled a large building which will be used as a health center. It will rate with the best in the State with modern equipment and an able, energetic staff.

A Chapter of the American College of Chest Physicians was organized in Savannah during the last annual session of the Medical Association of Georgia. Officers of the chapter are: President, Dr. Carl C. Aven, Atlanta; Vice-President, R. V. Martin, Savannah; and Secretary-Treasurer, Julius C. Burch, Atlanta. The chapter will meet annually during the annual session of the Medical Association of Georgia and in the same city.

Dr. J. T. Holt, Baxley, announces the re-opening of his offices since he recovered from a recent illness. He has been an efficient and active secretary of the Appling County Medical Society for many years. Dr. Holt has served several terms in the Legislature.

Dr. Fred Branan, formerly of Quitman, has been appointed resident physician at the Macon Hospital.

Dr. Emil J. Denz, of Portland, Oregon, has joined the staff of the Milledgeville State Hospital.

The Seventh District Medical Society will meet at Rossville, September 20 at 2:00 P.M. Dr. Fred H. Simonton, Chickamauga, reports that "a very fine sci-

entific program is being arranged with a full supply of entertainment."

The Southern Medical Association will hold its Thirty-Eighth Annual Meeting in St. Louis, Missouri, November 13, 14, 15, 16, 1944. Dr. Edgar G. Ballenger, Atlanta, is president-elect; Dr. Marion C. Pruitt, Atlanta, is chairman of Councilors; Dr. W. A. Selman, Atlanta, is a member of Councilors; Dr. Wm. L. Funkhouser, Atlanta, is vice-chairman of the Section on Pediatrics; Dr. Robert L. Bennett, Warm Springs, is secretary of Section on Physical Therapy; Dr. Olin S. Cofer, Atlanta, is secretary of the Section on Gynecology; Dr. Carl C. Aven, Atlanta, is second vice-president of the Southern Chapter of the American College of Chest Physicians, which will meet conjointly with the Southern Medical Association.

Capt. R. E. Sorensen, M.D., U. S. Public Health Service, has been assigned to duty in Brunswick and has assumed his duties as Assistant Glynn County Commissioner of Health.

The Bibb County Medical Society met at Baconsfield Clubhouse, Macon, August 1. Dr. Ralph H. Chaney, Augusta, president-elect of the Medical Association of Georgia, was guest speaker.

Dr. Everett S. Sanderson, professor of bacteriology and public health at the University of Georgia School of Medicine, Augusta, has just returned from Guatemala and Costa Rica where he studied tropical diseases.

OBITUARY

Dr. Henry J. Goodwyn, Carrollton; member; Atlanta College of Physicians and Surgeons, Atlanta, 1902; aged 70; died June 24, 1944, at his home. He was a native of Coweta County. Began practice in Carrollton and continued his professional work there for more than 40 years. Dr. Goodwyn was president of the Carrollton Federal Savings and Loan Association, member of the Carroll County Medical Society and Masons, deacon and member of the First Baptist Church. He was a highly respected citizen and had many warm personal friends. Surviving him are his widow, one daughter, Mrs. A. J. Baskin, Jr., Rev. H. P. Bell and Rev. Monroe Burns officiated at the funeral services conducted at the First Baptist Church. Burial was in the City Cemetery.

Dr. Will Hale Malone, Atlanta, Atlanta College of Physicians and Surgeons, Atlanta, 1912; aged 54; died July 10, 1944. He was a native of Villa Rica and a veteran of World War I. For 22 years he was chief surgeon of the out-patient department at the Veterans' Administration Facility at Atlanta. He was a member of the Methodist Church. Surviving him are his widow, one son, Ph. Mate W. H. Malone, Jr., of the Coast Guard.

Dr. James I. Hembree, Atlanta; Georgia College of Eclectic Medicine and Surgery, Atlanta, 1912; aged 54; died July 5, 1944, in a private hospital in Atlanta. Surviving him are his widow, two daughters, Mrs. Dorothy

Hardeman, Roswell; Miss Mary Bell Hembree, Atlanta; one son, Howard Hembree, San Francisco, Calif. Rev. T. P. Tribble officiated at the funeral services conducted at the First Baptist Church of Chattahoochee. Burial was in River View Cemetery.

Dr. Lee Wilbert Wiggins, Atlanta; member; Atlanta School of Medicine, Atlanta, 1908; aged 68; died July 20, 1944. He resided for a time at Chamblee then at Doraville while he maintained offices at 52 Whitehall Street, S. W. He practiced obstetrics and gynecology for more than 30 years. Dr. T. B. McBride officiated at the funeral services conducted at Spring Hill Chapel.

Dr. Marvin Riddick Smith, Cordele; member; Emory University School of Medicine, Emory University, 1905; aged 65; died on July 12, 1944, after an illness of short duration. He practiced in Crisp and adjoining counties for almost 40 years. His practice was limited to pediatrics. Surviving him are his widow, one daughter, Miss Anne Kilby Smith, teacher at Brunswick; one son, M. R. Smith, Jr., D.D.S., Cordele. Funeral services were conducted at the Cordele Methodist Church.

DURING FOOD SHORTAGES

It is well to bear in mind that *dried brewers yeast, weight per weight, is the richest food source of the Vitamin B Complex*. For example, as little as 1 level teaspoonful (2.5 Gm.) Mead's Brewers Yeast Powder supplies: 45 per cent of the average adult daily thiamine allowance, 8 per cent of the average adult daily riboflavin allowance, 10 per cent of the average adult daily niacin allowance.

This is in addition to the other factors that occur naturally in yeast such as pyridoxin, pantothenic acid, etc.

Send for tested wartime recipes, the flavors of which are not affected by the inclusion of Mead's Brewers Yeast Powder. Mead Johnson & Company, Evansville, Ind., U. S. A.

NEW AND NONOFFICIAL REMEDIES, 1944, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1944. Cloth. Price, postpaid, \$1.50. Pp. 778. Chicago: American Medical Association, 1944.

The current volume of New and Nonofficial Remedies reflects two important and forward looking decisions of the Council, namely, to use the metric system exclusively in all its publications, and to consider for acceptance contraceptive preparations offered for use as prescribed by physicians. These decisions in turn reflect the vigorous and progressive leadership of the Council in the service of medicine.

The chapter on contraceptives is quite comprehensive;

with the acceptance of more preparations it will undoubtedly assume a large place in New and Nonofficial Remedies. The Council has thus far accepted some contraceptive jellies and creams, contraceptive diaphragms, diaphragm inserts, syringe applicators, and fitting rings. It is understood that a number of additional preparations have been submitted for Council consideration since the book went to press. This chapter represents a courageous and long-needed innovation.

Some of the new preparations that appear in this volume are: Succinylsulfathiazole, a sulfonamide, a proprietary brand being "Sulfasuxidine"; Diodrast Concentrated Solution, a preparation of the already accepted Diodrast, for use in a special diagnostic procedure for visualization of the circulatory system and also cholangiography; a preparation of Sodium Benzoate for use as a liver function test; Mersalyl and Theophylline, accepted under the name Salyrgan-Theophylline Tablets, proposed as an adjunct to intravenous injection of the already accepted drugs; Zinc Insulin Crystals and Zinc Insulin Injection Crystalline; Tetanus Toxoid; and Concentrated Oleovitamin A and D, a dosage of the pharmacopoeial preparation.

A glance at the preface shows that certain general articles have been revised to bring them up to date. More or less important revisions have been made of the following chapters: Barbituric Acid Derivatives, Estrogenic Substances; Parathyroid; Ovaries; Sulfonamide Compounds; Vitamins, especially the sections, Vitamin B Complex and Vitamin D. In this connection it is worth noting that each chapter in the book is reviewed annually, or more often if indicated, by the responsible referee for such revision.

This volume is of paramount interest to all those concerned with rational and modern drug therapy.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1943. Cloth. Price, postpaid, \$1.00. Pp. 150. Chicago: American Medical Association, 1944.

The present volume of reprints contains only eight reports on rejected articles; it is interesting to note that objections to these are on a much higher plane than those it was necessary to urge against the flagrantly quackish preparations of earlier days.

Perhaps the most noteworthy of the nineteen general and "status" reports in this volume is the one declaring the Council's intention of using henceforth only the metric or centimeter-gram-second system in its publications. The report itself gives some interesting and readable history on the subject of weights and measures. Of most timely interest to the general physician as well as the endocrine specialist is the report on nomenclature of endocrine preparations. The report gives a currently quite complete list of the available commercial preparations, including those not accepted by the Council as well as those which stand accepted. Another report in the field of endocrinology is that recognizing the use of estrogens in the treatment of prostatic carcinoma.

Attention should be called to at least two of the reports concerned with vitamin preparations, namely, the status report giving the Council's decision that the evi-

dence does not yet warrant the acceptance of cod liver oil preparations for external use, and the report announces the Council's recognition of the use of massive doses of vitamin D in arthritis, and in this volume includes a current comment from *The Journal* titled "Hlope (false) for the Victims of Arthritis," which reemphasizes this objection.

The status report on xanthine compounds gives a much needed delimitation of the therapeutic claims that may be recognized for aminophylline and its related xanthine derivatives. Of similar interest is the report on the local use of sulfonamides in dermatology, and in the same category may be mentioned the report on agents for the treatment of *Trichomonas Vaginitis*, which points out that the present aim should not be for new medicaments in this field but for further information, especially concerning failures with those that have been used. In another status report the Council sets forth its conclusion that present evidence does not justify claims for advantage of oral use of sodium sulfonamides over the free drug.

In line with its decision to consider for acceptance various contraceptive preparations, the Council published a status report on conception control, which is concluded in this volume. The report comprises a series of concise statements on the various preparations and methods of control, prepared by Dr. Robert Latou Dickinson, together with a statement of criteria by which the Council will consider the acceptability of contraceptive jellies, creams, and syringe applicators and nozzles, diaphragms and caps.

It cannot be too often said that this volume, as well as the other publications of the Council, remains of paramount interest to all who are concerned with rational use of therapeutic agents.

EDUCATION PROGRAM TO CURB POLIOMYELITIS

To provide men and women professionally trained in public health work who will aid the nation's army of polio fighters, The National Foundation for Infantile Paralysis has set aside the sum of \$50,000 for fellowships in health education.

Under this program, which has been developed in cooperation with the U. S. Public Health Service, qualified men of certain selective service classifications, as well as qualified women, will go into training starting this fall.

Basil O'Connor, president of the National Foundation, explained that in coordinating the community's resources of official and voluntary agencies the services of competent health educators would greatly facilitate handling polio outbreaks and the long-continued after-care of infantile paralysis patients. The National Foundation feels that sponsoring these fellowships will, therefore, result in a public service of far-reaching benefit, he added.

In cooperating with the National Foundation, Surgeon General Thomas Parran, of the U. S. Public Health Service said: "The success of

well-planned state and local health education programs has amply demonstrated the value of trained personnel having a thorough knowledge of both public health and education. In recent years, the rapid expansion of health education throughout the nation has created a demand for qualified workers that far outstrips the available supply."

Candidates for health education fellowships will be selected by an advisory committee of the U. S. Public Health Service, and those accepted will be assigned to schools of public health at Yale University, the University of Michigan and the University of North Carolina.

A Bachelor of Science degree, or its equivalent from a recognized college or university, is an essential qualification for one of these fellowships leading to the Master of Science degree in public health. This postgraduate training will consist of nine months' academic work, followed by three months of supervised field experience.

Women between the ages of nineteen and forty who have the above educational qualifications and who are citizens of the United States are eligible. Men who are United States citizens over thirty years of age also may apply, and the War Manpower Commission has declared Selective Service registrants in 4F and 1AL classifications as eligible for health education fellowships.

A fellowship in health education covers a stipend to the trainee of \$100 monthly for twelve months; tuition and university fees to the school; and expenses for field service. Applications are obtainable from the office of the Surgeon General, U. S. Public Health Service, Washington (14), D. C. Applications must be accompanied by a transcript of college credits and a small photograph, and must be in the office of the Surgeon General not later than Aug. 15, 1944.

HOSPITALS' RESPONSIBILITY

Social changes now taking place will have a marked effect upon the hospital's responsibility to its community. It is, therefore, timely and necessary that we consider these changes and develop ways and means of meeting them, states Frank J. Walter, president of the American Hospital Association and superintendent, St. Luke's Hospital, Denver, writing in the July, 1944, issue of *Hospitals*, journal of the American Hospital Association.

More and more health service, it is agreed, will be expected from the hospital. Mr. Walter indicates, expressing the belief that hospitals can control their own destiny—at least to the extent of determining how they will meet the challenge of continuous social evolution.

"In keeping with the deeply significant social advances that have been made during the past

decade, the American Hospital Association must initiate a program of profound implications for the future care in America," according to the association president. "This program is devoted to the expansion, development, and coordination of hospital care of high quality, making it available to all persons."

An adequate program of education for nurses and physicians is essential to an enlightened and advanced health program he continues, and education of hospital personnel will result in improved hospital care.

The hospital should cooperate with the medical profession in inaugurating a program of prevention of disease in the community, he says, and it should assume more responsibility in the care of ambulatory patients.

Returning servicemen will bring back memories of the benefits of modern hospitalization on the battle front and will demand such service for themselves and their families; those engaged in war industries have learned the economic value of health conservation and will continue to demand it. Those who have experienced benefits of the Blue Cross Plans will not be content without this protection and all these groups will not be satisfied with only bed care in hospitals, but will demand all the latest therapeutic and diagnostic facilities which are to be found in modern hospitals.

Hospitals today, despite their crowded conditions, must be ready to care for veterans of the present war and they must consider themselves an everyday necessity in the life of the American people.

The American Physicians Art Association, with the cooperation of Mead Johnson & Company, is offering an important series of War Bonds as prizes to physicians in the armed services and also physicians in civilian practice for their best artistic works depicting the medical profession's "skill and courage and devotion beyond the call of duty."

Announcement of further details will be made soon by the Association's Secretary, Dr. F. H. Redewill, Flood Building, San Francisco, Cal.

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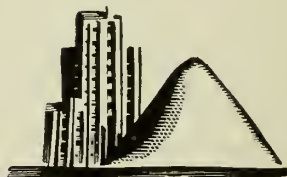
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Hay Fever

facts and figures

The annual crop of ragweed pollen in North America weighs more than 2 BILLION POUNDS.



A single teaspoon holds more than 1 BILLION PARTICLES of ragweed pollen.



As few as 6 PARTICLES of ragweed pollen can produce hay fever symptoms.

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Smith, Kline & French Laboratories, Philadelphia

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Number 9

PRESENTATION OF THE GOLD KEY TO THE PRESIDENT, W. A. SELMAN, M.D.

CLARENCE L. AYERS, M.D.
Toccoa

Two years ago when Dr. Selman was elected president-elect of the Medical Association of Georgia, the unanimous comment was: "A well deserved honor."

Perhaps there is no man in this Association that has worked harder for organized medicine than has Dr. Selman. Those in this Association who have attended every session for many years could always count on his being here at the first meeting of the House of Delegates on Tuesday, and remaining until the last paper on Friday, and then go by his room for parting refreshments. Not many men have been so loyal.

I could not mention all the positions of honor he has held but among them are: president of the Fulton County Medical Association, president of the Fifth District, and chairman of the Council of this Association for several years, chairman Publication Committee of THE JOURNAL of the Medical Association of Georgia, chairman Procurement and Assignment Committee for Physicians, president Medical Association of Georgia. His most recent honor came as a member of the Council of the Southern Medical Association.

This has been a hard year on presidents, from the President of the United States up to the President of the Medical Association of Georgia. Many of our doctors are in the armed forces, and that has meant

heavier work for those remaining at home. Some of our district societies discontinued their meetings for the duration but I believe, as a class, you will find no group more loyal and willing to do additional work than the doctors. Our president has steered the Association successfully through these trying times. The thought uppermost in our minds is that this year may bring victory and the dawn of a just and lasting peace. Dr. Selman has worked to this end.

In addition to Dr. Selman's splendid professional qualifications, he is one who still believes that medical ethics is not a lost art. If a surgical case was referred to him most of them would recover, but if one did not he would not mention to some member of the family that the patient was sent to him too late. He would tell them that the patient was very sick, and that we did our best for him and was sorry that we could not do more. These qualities make him referred to in his home town as the young doctor's friend.

During his term of office he has done a fine job for the Association, visiting the districts and telling the members and guests of the many advantages of organized medicine. His work as chairman of the Procurement and Assignment Committee has been outstanding.

With such a good subject to deal with I could go on indefinitely, but without taking more of the time here tonight it gives me very great pleasure, Dr. Selman, to present you the gold key of the Association which is emblematic of services rendered. You deserve it, and we know you will wear it with pleasure to yourself and with honor to the Association which gives it to you. May you continue to render service to the Association.

THE COUNCIL ON MEDICAL SERVICE AND PUBLIC RELATIONS OF THE AMERICAN MEDICAL ASSOCIATION

G. LOMBARD KELLY, M.D.

Augusta

The Factors Behind the Creation of the Council

As an outgrowth of the feeling among many members of the medical profession throughout the country that the American Medical Association should adopt a more militant attitude in the face of rising threats to the established form of practice of medicine in the United States, representatives from a number of states presented resolutions to the House of Delegates in June, 1943, designed to accomplish two things: (1) to create a special council of the Association to assume the duty of leading the fight against the unfriendly forces, and (2) to establish an office of information and listening post in the national capital. Comments on some of these resolutions follow.

The resolution from the Minnesota State Medical Association was long and specific. It specified how the members of the proposed council would be appointed and what sections of the country they would represent as well as who would be ex-officio members of the council. It also outlined the duties of the proposed council.

The resolution from the Indiana State Medical Association was also long and specific. A pertinent paragraph of this resolution follows:

"In the minds of many who are not actively connected with the conduct of this Association we have been and are continuing to be defeated in our efforts to preserve our way of life. As these defeats continue, the demand for new leadership will increase." Reference is here made to an editorial appearing in the May issue of the *Medical Annals* of the District of Columbia, which says in part: "What the pro-

fession as a whole needs at this time above anything else is leadership which inspires confidence — able, constructive leadership. It needs the confidence which is inspired by elected leaders who can speak for them effectively without arousing unnecessary antagonisms. It needs in its national organization a quicker response to the heartbeat of the doctors and the times. It needs the elimination of reactionary tendencies at the top."

The resolution from the Medical Society of New Jersey was directed solely toward the establishment of a legislative bureau in Washington. The same is true of the resolution from the Oklahoma State Medical Association.

There was also a resolution from the Section on Radiology which recommended the creation of a Council on Medical Care which included a provision for the establishment of a Bureau of Information on Medical Service in Washington.

As an outgrowth of the foregoing resolutions the House of Delegates in June, 1943, established the Council on Medical Service and Public Relations. On the following day the Board of Trustees appointed the six members to represent various sections of the country. Ex-officio members included the President of the Association, Past-President, and the Secretary and General Manager. The Chairman of the Board of Trustees was designated by the board as its representative.

The Council Gets Under Way

The first meeting of the new council was held on July 21, 1943, in Chicago. Dr. Louis H. Bauer was elected chairman and Mr. J. W. Holloway, Jr., Director of the Bureau of Legal Medicine and Legislation, was appointed acting secretary of the Council; committees were appointed to formulate a program, prepare a budget and select a permanent secretary. The general scope of the work of the council was discussed and a number of matters were taken up at length.

The second meeting was held in Chicago on Sept. 9 and 10, 1943. A statement of general policies was adopted and referred to the Board of Trustees for approval. These

general policies, which were published in *THE JOURNAL*, Nov. 6, 1943, were as follows:

"Pursuant to carrying out the duties imposed on it by the House of Delegates, the Council has adopted the following general policies:

"1. The Council on Medical Service and Public Relations recognizes the desirability of widespread distribution of the benefits of medical science; it encourages evolution in the methods of administering medical care, subject to the basic principles necessary to the maintenance of scientific standards and the quality of the service rendered.

"It is not in the public interest that the removal of economic barriers to medical service should be utilized as a subterfuge to overturn the whole order of medical practice. Removal of economic barriers should be an object in itself.

"It is in the public interest that the standards of medical education be constantly raised, that medical research be constantly increased and that graduate and post-graduate medical education be energetically developed. Curative medicine, preventive medicine, public health medicine, research medicine and medical education all are indispensable factors in promoting the health, comfort and happiness of a nation.

"2. The Council through its executive committee and secretary shall analyze proposed legislation affecting medical service. Its officers are instructed to provide advice to the various state medical organizations as well as to legislative committees concerning the effects of the proposed legislation. It shall likewise be the duty of its officers to offer constructive suggestions to bureaus and legislative committees on the subject of medical service.

"3. The Council approves the principle of voluntary hospital insurance programs but disapproves the inclusion of medical services in those contracts for the reasons adopted by the House of Delegates at the 1943 meeting.

"4. The Council approves voluntary prepayment medical service under the control

of state and county medical societies in accordance with the principles adopted by the House of Delegates in 1938. The medical profession has always been strongly opposed to compulsory health insurance because (a) it does not reach the unemployed class; (b) it results in a bureaucratic control of medicine and interposes a third party between the physician and the patient; (c) it results in mass medicine which is neither art nor science; (d) it is inordinately expensive and (e) regulations, red tape and interference render good medical care impossible. Propaganda to the contrary notwithstanding, organized medicine in general, and the American Medical Association in particular, have never opposed group medicine prepayment or group medical practice as such. The American Medical Association and the medical profession as a whole have opposed any scheme which on the face of it renders good medical care impossible. That group medicine has not been opposed as such is evidenced by the fact that there are many groups operating in the United States which have the approval of the medical profession, and members of these groups are and have been officials in the national and state medical organizations. That group medicine is the Utopia for the whole population, however, is not probable. It may be and possibly is the answer for certain communities and certain industrial groups if the medical groups are so organized and operated as to deliver good medical care.

"5. The Council believes that many emergency measures now in force should cease following the end of hostilities.

"6. The Council believes that the medical profession should attempt to establish the most cordial relationships possible with allied professions.

"7. There is no official affiliation between the American Medical Association and the National Physicians' Committee. However, since it is the purpose of the National Physicians' Committee to enlighten the public concerning contributions which American medicine has made and is making in behalf of the individual and the

nation as a whole, it is the opinion of the Council that the medical profession may well support the activities of the National Physicians Committee and other organizations of like aims.

"8. American medicine and this Council owe a responsibility to our colleagues who are making personal sacrifices to answer the call of the armed forces. Therefore the Council expresses the desire to cooperate with the Medical Committee on Postwar Planning in order to assist our colleagues in reestablishing themselves in the practice of medicine and in the preservation of the American system of medicine."

Purposes and Functions

Section 4 of Chapter IX of the By-Laws provides that the duties of the Council shall be as follows:

"(1) To make available facts, data and medical opinions with respect to timely and adequate rendition of medical care to the American people;

"(2) to inform the constituent associations and component societies of proposed changes affecting medical care in the nation;

"(3) to inform constituent associations and component societies regarding the activities of the Council;

"(4) to investigate matters pertaining to the economic, social and similar aspects of medical care for all the people;

"(5) to study and suggest means for the distribution of medical services to the public consistent with the principles adopted by the House of Delegates, and

"(6) to develop and assist committees on medical service and public relations originating within the constituent associations and component societies of the American Medical Association.

"In the exercise of its functions, this Council, with the cooperation of the Board of Trustees, shall utilize the functions and personnel of the Bureau of Legal Medicine and Legislation, the Bureau of Medical Economics and the Department of Public Relations in the headquarters office."

The Council is also bound by the actions of the House of Delegates on the subject of medical care and its distribution, notably

the platform adopted in 1937 as amended and amplified in subsequent years by the various resolutions and reference committee reports adopted by the House of Delegates.

Organization and Plan of Operation

The Council then considered its purposes and functions and adopted a plan covering them. This plan was submitted to the Board of Trustees and was finally adopted at the meeting of Nov. 20, 1943. Publication was made in THE JOURNAL, Dec. 4, 1943.

Officers were elected and committees appointed. The general outline of the methods of operation follows:

"1. In carrying out the directive in the By-Laws as to relationship with the other bureaus and departments of the Association, the Council has established close collaboration (a) with the Bureau of Medical Economics, which has been asked and has expressed the willingness to do the research on many of the economic problems necessary for the Council's study, and which is well equipped to carry out such research; (b) with the Bureau of Legal Medicine and Legislation. Joint bulletins will be issued with that bureau on legislative matters. Attempts will be made to effect wider distribution and, if necessary, more frequent publications of such bulletins; (c) with the Department of Public Relations. The Council shall utilize the sources of information of this department and joint bulletins may be issued from time to time with it, and if indicated with other bureaus of the American Medical Association. All planning will be to avoid overlapping of functions and duplication of effort.

"2. The Council on Medical Service and Public Relations has extended the sources of information of the American Medical Association on problems with which the Council is specifically concerned. Through its membership and by cooperation with constituent associations and component societies and the utilization of other facilities, the Council will disseminate such information toward effecting its objectives. The secretary of the council, with its approval,

will undertake such travel as may be necessary.

"3. In order that constituent associations and component societies may be kept informed of the activities of the Council and of proposed changes in the status of medical care, and that the Council may be of assistance to those associations and societies, the Council has requested each State Association to designate an existing committee or create a new committee to function with the Council on the state level.

"Each state organization has also been requested to contact each component society in the state and ask it similarly to designate or form a committee to function in connection with the programs of the Council. Where such organization is feasible, it has been suggested that committees be created along the lines of congressional districts.

"Such state and county committees have been urged to keep the Council informed of their local problems and activities.

"State organizations also will be requested from time to time to conduct experiments in the various methods of medical care and to inform the Council of their results so that the Council may study and evaluate the experiments and transmit the information acquired to all concerned.

"4. The Council feels that under its directive it is its duty to endeavor to evolve such modifications of our present system of medical care as may be necessary to cover all the people and be in accord with the traditions of American medicine as to high standards of medical care and the American tradition of free enterprise as already outlined in paragraph 1 of the Council's policies previously published. To accomplish this, study must be made of all economic, social, and similar aspects of such care.

"5. In order that the above program may be effectively carried out, the Secretary of the Council, with the guidance of the Council in conformity with the above expressed relationships with other bureaus and departments, shall inform the profession through the various state organizations of all pending national legislation and bu-

reau directives affecting the practice of medicine. It shall likewise be his duty with the guidance of the Council, to arrange for medical representation at meetings and hearings pertaining to medical care, collaborating in the representation with other councils and bureaus of the American Medical Association who have an interest in this same subject.

"6. The Secretary is instructed with the supervision of the Council, and in collaboration with the Department of Public Relations, to disseminate information concerning the activities of the Council through the publications of the American Medical Association and the various state medical journals, and to prepare and release information on medical care."

Other Activities of the Council

All state societies were circularized and asked to designate committees to work with the Council and through them the county societies were asked to appoint like committees. Each local committee was asked to establish contacts with local lay organizations. They were requested to study and start a campaign of education on the Wagner-Murray-Dingell bill. Forty-four state societies designated committees. Two replied they had no such committees and two were not heard from. Five states sent in the lists of their county committees. Indiana reported at the Secretaries' Conference and to the Council on an elaborate contact plan which it set up and this was forwarded to all state societies for their information with the suggestion that they use such parts of the plan as were suited to their organizations and needs.

The chairman was instructed to draw up a statement of the attitude of the Council on the Wagner-Murray-Dingell bill. In collaboration with Mr. Holloway, this was done. It was published in *THE JOURNAL* Nov. 13, 1943, and reprints were forwarded to all state societies and editors of all state journals. Further requests for copies followed and the statement had a wide distribution.

It was felt that the sources of information of the Association at Washington should be extended and this was done.

At the November meeting it was decided to issue a semi-monthly bulletin of information received, and this went into effect in January, 1944. *The Bulletin* is sent to the members of the House of Delegates, all state secretaries, editors of state journals, state committees, and county committees collaborating with the Council and to all state and county officers requesting it. At present the mailing list comprises approximately 2,000 names and it is still growing. It is felt that these bulletins are most useful to those actually engaged in the work of organized medicine.

The Bureau of Medical Economics prepared a survey of health insurance in all English speaking countries, and at the Council's request it brought up to date its 1940 survey of medical service plans.

The attitude of the Council on compulsory sickness insurance was stated earlier in this report, and its attitude on the Wagner-Murray-Dingell bill was given in its statement on that bill. It was recommended that the House adopt these statements as its policy on the subjects involved.

Just prior to the November meeting the Council arranged to engage the services of the speaker, who assumed office the first of January on a six months' leave from the University of Georgia School of Medicine.

Washington Office Authorized

The Council met again on Feb. 14 and 15, 1944, and at that time decided it was advisable to open an office in Washington. Consequently, the Board of Trustees was asked to appropriate funds for establishing in Washington, under the auspices of the Council, an office of medical economic research, this office to be charged with the collection of information and statistical data concerning medical care, its distribution, its availability, its costs, and its control in various portions of the United States and that the information thus collected be made available to the medical profession through the publications of the American Medical Association, to the Bureau of Medical Economics of the American Medical Association for its studies of this problem, and to other appropriate agencies in-

terested in the extension of medical service and the provision of medical care and related subjects.

Considerable study has been given to the subject of voluntary insurance, diagnostic clinics and medical service bureaus. The Council hopes to cover some of these subjects in a supplementary report.

Organization of Medical Students

The Council studied the status of medical students and feels that they should be brought into the fold of organized medicine as early as possible so that they may be inculcated with the ideals and ethics of medicine. Hence, it recommends that the House direct the Board of Trustees to work out a plan whereby students in approved medical schools can become student members of the Association, and that the Board prepare the necessary changes in the Constitution and By-Laws, for submission to the House, in order to accomplish this.

The Council also has requested the Council on Medical Education and Hospitals to consider taking the necessary steps as soon as practicable to have each medical school give a course on medical sociology, medical economics and medical ethics.

Cooperation of Other Departments

There has been close collaboration with the Bureau of Legal Medicine and Legislation on legislative matters besides the Wagner-Murray-Dingell bill and that bureau has issued legislative bulletins, in addition to the bulletins of the Council.

The Council has had the complete cooperation of the Bureau of Medical Economics, but that bureau is understaffed, and the Council has requested the Board of Trustees to enlarge the staff of that bureau as soon as practicable so that it will be in a position to undertake more extensive surveys.

There is also close cooperation with the Department of Public Relations and all sources of information are used jointly. It is planned to publish more frequent statements from the Council in *THE JOURNAL*.

Members of the Council and the secretary have spoken frequently before state and county medical societies and lay organiza-

tions and have entered into debates and forums on the work of the Council and on the Wagner-Murray-Dingell bill.

Washington Office Opened

Following the approval by the Board of Trustees of the Council's budget for the establishment of an office in Washington, the speaker proceeded there and had a conference with Dr. Joseph S. Lawrence of Albany, New York, who was selected as consultant to the Washington office. After some difficulty in securing office space, a suite of rooms was rented in the Columbia Medical Building and the necessary furnishings and equipment purchased. A secretary was employed and the office was formally opened April 1, 1944. It is at present in charge of Dr. Lawrence and the secretary with occasional assistance from Mr. J. W. Holloway. Scores of books, booklets, and pamphlets have been forwarded to this office and distribution of these is made on request, particularly to the members of the Congress and employees of governmental agencies.

Conference on Medical Care

On May 22 and 23, 1944, the Council will meet at the Mayflower Hotel in Washington. On May 22 the conference will sponsor a conference on medical care to which have been invited representatives from a number of organizations and government bureaus, among these the American Federation of Labor, the Congress of Industrial Organization, the United States Chamber of Commerce, Children's Bureau, Veterans' Bureau, and the National Physicians' Committee.

Conclusion

The Council feels deeply its responsibility to American medicine and is striving earnestly to fulfill its obligations to the members of the Association. It is striving to prepare recommendations for the House of Delegates to be presented at its meeting in Chicago next month. It is the sincere purpose of the members of the Council to present a definite answer to the crying question of the day: How can adequate medical care be supplied to all strata of the population in all sections of the country? The solution will help to escape regimentation.

MEDICAL DIAGNOSTIC SIGNS AND SYMPTOMS

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The aim of all medical diagnosis is accuracy. One tries to be positive in determining a certain condition. Gradually we have accumulated various tests and apparatus which we have come to consider as superior to human logic. As a profession we are constantly endeavoring to eliminate guesswork from medical practice. Early in my medical career I observed a patient concerning whose diagnosis I was completely in doubt. In despair I naturally turned to one of my older confreres in whom I had extreme confidence. I began by telling him, "Doctor, I have a patient whom I don't know what is the matter with her." His reply has never been forgotten. Without giving the opportunity to elaborate in any detail, he interrupted by saying, "Why, that's nothing. I have a hundred." We certainly all agree that each of us today has one or more patients whose condition we do not understand.

Yet we must diagnose if we are to treat intelligently. Any physician will admit that if he knows the diagnosis he can properly advise the patient. In by-gone years we have heard how physicians could "smell" typhoid fever and certain other diseases. Observation was a highly developed sense in the "horse and buggy" doctor. The various diagnostic signs used over the years came to be known by the men who first brought them to public notice. The medical dictionary lists 675 such signs; 424 were listed twenty years ago. Many of these became obsolete years ago. It would be interesting to know how many signs are currently used by the average physician in making an examination. Perhaps we have forgotten something of value from the past.

The pressure of patients now bearing on the doctors who remain in civil life is great and growing greater. Witness the

sudden and too frequent deaths of our brothers in the profession — the majority with heart disease! The temptation is great to guess at the diagnosis and pass on to the next patient. Let us never do less for our patients. We must give the best we can. Every faulty diagnosis is costly in time and human misery, not to mention money.

As in practically every other line of endeavor, there are some so-called short-cuts in medicine. Rapid and accurate differential diagnosis is not taught in medical schools. It is worked out laboriously by the individual physician for his own use. One of the best examples of this is the method developed by the late Dr. Rufus Dorsey, called "Diagnosis by Formulae." Many of you will recall how Dr. Dorsey expounded his formulae, yet he would never give them to others. His reply would always be, "These will not help you. You must work out your own." However, one of his formulas has been quite generally adopted and is still valuable. It relates to obscure fever of two weeks or longer duration. His formula was: M.T.T.T.S. (malaria, typhoid, typhus, tuberculosis, sepsis).

Medical diagnosis is still an art and requires the keen observation and reasoning experience of the trained medical man. It is true that many patients study their symptoms and read many lay articles on medical topics to make their own diagnosis. But this smattering of medical education is often a detriment rather than a help to the physician.

Rubeola, or measles, is one of the few diseases which today defies us as to cause and treatment. Yet its complications at times extend into adult life. It is a serious disease and should be so considered. Two important diagnostic signs should be remembered: First, the Koplik spots in the mouth are diagnostic. Secondly, under the ultra-violet light the exanthema may be clearly defined two days prior to the outbreak of the rash. A red rash on the palate; also white mucous patches in the mouth have been described.

To enumerate all of the various important and valuable signs used today in diag-

nosis would be tiring. Yet it is safe to predict that the average doctor uses less than twenty such signs in his work. In an effort to accentuate the importance of careful examination and the use of helpful criteria, I will limit my discussion of diagnostic signs to those of appendicitis, gall-bladder disease and thyroid insufficiency. Regarding the second group, I desire to add another sign for your consideration.

Thirty-one different signs have been listed in the diagnosis of appendicitis. Some are quite obsolete. A sensation of pain or distress in the epigastric region or precordial region on pressure over McBurney's point is still considered suspicious of appendicitis. If the examiner's hand is suddenly released from pressure over McBurney's point and pain is produced, it indicates peritoneal irritation. Localized tenderness on pressure over McBurney's point is characteristic. In acute appendicitis there is often absence of the abdominal reflexes on the right side. Pressure on the left side, over the point corresponding to McBurney's point, will elicit the typical pain at McBurney's point in appendicitis; but not in other abdominal infections. There may be marked relaxation of the abdominal muscles on the right side in chronic recurrent appendicitis. In cases where there is question as to simulated pain, the examiner would feel the spontaneous muscle spasm in true inflammation, and furthermore would note an increase in pulse rate on pressure. Pain in the right lumbo-dorsal region with negative genito-urinary findings may suggest a retrocecal appendix. A rising white cell count or a rapidly rising poly count indicates increasing infection. In all cases localized pain and rigidity indicate inflammation. It is well to remember that even intestinal obstruction may be caused by appendicitis. Deaver reported an appendix 22 inches long which had caused acute obstruction of the intestine in the left upper quadrant. Rarely acute appendicitis may indicate itself by sudden agonizing pain in the left lower quadrant. From the x-ray point of view we must remember appendicitis is not ruled out when the appendix is not visualized, for it may

be retrocecal and hidden, or the lumen obliterated by inflammation or fecaliths.

An interrupted appendix is diagnostic as is also a half-filled appendix. Retention of barium in the cecum longer than 24 hours is strongly suggestive, especially if associated with local tenderness over the cecum on palpation under the fluoroscope.

Gallbladder disease is more insidious and much more difficult of detection. The Mayo Clinic once reported 43 per cent of 1,444 autopsies showed definite gallbladder disease which had gone unsuspected during life.

The inability of a patient to eat onions without tasting them for hours afterward is called the onion test, and by some observers is held highly. A bad taste in the morning, described as bitter, brassy or metallic, is common. Lack of appetite for breakfast with a vigorous appetite for the evening meal is frequently encountered. Excessive gas formation immediately after eating is a common symptom. An inordinate taste for fats usually accompanies this disease. Colic is indicative of stones, but could be due to a plug of mucus in the duct. Light colored stools at intervals is to be expected. Constipation is the rule. At times when the putrid bile is expelled there may be colitis with dark green stools of offensive odor. Secondary anemia is a usual concomitant. Weakness, fatigability and tenderness of the muscles are frequent. The skin may be yellowish without the sclera showing any change. Pinching the skin is often painful. The most diagnostic sign is Murphy's sign. Although medical students are taught never to palpate with the thumb, this sign requires the left thumb pressed firmly under the right costal margin while the patient takes a deep inhalation. This causes the diaphragm to descend and push the gallbladder against the thumb. In the presence of inflammation of the gallbladder, inspiration is suddenly checked due to pain localized under the thumb. The angle of the right scapula is the location for referred gallbladder pain.

I wish to present a new sign which is frequently associated with Murphy's sign. It consists of a discoloration of the skin of

the upper abdomen with a pale brownish stain; usually localized to the epigastrium and right upper quadrant, but at times covering the abdomen. This stain varies in color from greenish-yellow to light brown. It does not extend over the chest. It may often be demonstrated by comparing with the palm of the examiner's hand. This discoloration is present only in chronic gallbladder conditions and is an actual bile staining of the tissues. It disappears partly on pressure. In certain cases the stain is also noted wherever there is pressure such as under shoulder straps, etc. From experience, it is as diagnostic as Murphy's sign. X-ray signs of gallbladder disorder are usually definite. Stones will show after the Graham dye test, but only if the gallbladder fills with the dye. No shadow of the gallbladder after the dye may mean serious trouble. A gallbladder which fills but does not empty after a fatty meal, is a sign of pathologic function.

The prevalence of thyroid disturbances and the general use of thyroid extract in therapy prompts one to present some of the cardinal signs of thyroid deficiency. Naturally, one would not expect to find every one of these signs in every case of thyroid insufficiency. Sparseness of the outer halves of the eyebrows; narrow palpebral fissures; coarse, dry, falling hair; dry, pudgy skin which does not pit on pressure; susceptibility to cold; slow speech; slow thinking; slow actions; generalized obesity; poor teeth with many cavities and decay; thick tongue; high, narrow palate; constipation; inability to concentrate; poor school work; temper tantrums; delayed bone age (x-ray); poor bone calcification; low basal metabolic rate; high blood cholesterol; excessive or scanty menses; large breasts; heavy buttocks; delayed or absent dentition; birth weight in excess of 8½ pounds; hard wax accumulation in ears; enlarged, weak heart (myxedema heart); faulty nail development. The best proof of your diagnosis is the therapeutic test. Usually less than 1 grain of thyroid daily will bring results. However, if as much as 3 grains are used without relief the diagnosis is to be considered faulty. When the physician wishes

a quick estimate of the basal metabolic rate, this may be done by adding the pulse rate to the pulse pressure and subtracting 111. The difference is the BMR. Example: $P = 70$, $BP\ 120/79$, $PP\ 41$; $70 + 41 - 111 = 0$.

In summary, I may say that in spite of hundreds of diagnostic signs the medical profession is leaning more to the mechanical aids in diagnosis. Yet medicine still is dependent upon the acumen of the individual physician for detection of disease. The regular use of all possible diagnostic aids is advocated. I stressed the importance of careful study of each patient regardless of the pressure for time. Diagnostic factors associated with appendicitis, gallbladder disease and thyroid failure have been enumerated together with a new sign in chronic cholecystitis.

THE MANAGEMENT OF THE OBESE DIABETIC

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When I was asked to discuss with you some topic relating to diabetes, at first I was at a loss as to what phase of such a vast and interesting subject would be of most interest to you. I finally decided that a discussion of the proper management of the diabetic patient who is fat would be of value, particularly since insufficient emphasis has been directed toward their management.

In a statistical study of the incidence of diabetes associated with obesity, Joslin¹ reviewed 3,094 of his cases of diabetes in adults twenty years of age or older. At the onset of the diabetes 62.7 per cent of the males and 67.4 per cent of the females were overweight. It was also shown that 33.8 per cent of the males and 41.1 per cent of the females were 20 per cent or more overweight. Only 3.1 per cent of the males and 4.1 per cent of the females were 20 per cent or more underweight.

Thus we see that a substantial percentage of diabetics fall into this obese group.

As a rule, the diabetes seen in the obese individual is mild and can be fairly well controlled by some restriction in carbohydrate intake with or without the addition of small doses of insulin. It has been frequent practice only to advise these patients to avoid sugar, excessive bread and starchy vegetables. Upon such management, I can not take exception too strongly.

The goal in the management of any diabetic patient is the maintenance of a normal blood sugar and the absence of glycosuria. Durkin and Fetter² insist that the restoration of a normal metabolism should also include the establishment and maintenance of a body weight which is normal or slightly below normal values. This loss of weight in the management of the obese diabetic has been too frequently neglected. Too much emphasis cannot be placed on the importance of a normal weight. The rationale for such a statement is obvious when we consider the effect of obesity on the utilization of carbohydrates. Investigators such as Paullin and Sauls³ and John⁴ have demonstrated abnormal glucose tolerance curves of the diabetic type in a high percentage of obese individuals who were aglycosuric and who could not be considered as true diabetics. These patients nevertheless showed a diminution in their ability to utilize glucose. Ogilvie⁵ also demonstrated a high percentage of abnormal glucose tolerance curves in obese women without glycosuria. He pointed out that impaired carbohydrate tolerance was related to the duration and not to the degree of obesity. The carbohydrate tolerance did not appear impaired unless obesity had been present for at least eighteen years.

Numerous investigators have proven that weight reduction lessens the severity of diabetes and improves carbohydrate utilization. In this connection, Newburgh and Conn⁶ have carried out some very interesting studies. They selected a group of obese individuals, all of whom were glycosuric and showed glucose tolerance curves typical of diabetes. By present diagnostic standards all of these patients would have to

be considered as true diabetics. Without the use of insulin but with only a strict reduction diet, these patients became aglycosuric with normal blood sugar values. When these patients returned to a normal weight, glucose tolerance tests were repeated and a surprisingly high percentage revealed now a normal ability to oxidize glucose as shown by normal glucose tolerance tests. This ability remained as long as a normal weight was maintained. These investigators proposed that the majority of obese diabetics are not true diabetics, but have obesity with an attendant glycosuria and hyperglycemia. Most observers are inclined to believe that it is still best to consider this group as true diabetics. In either event the advantage of weight reduction is apparent. As long as the patient is considerably overweight, regardless of how high the initial fasting blood sugar must be, the apparent need for insulin disappears with weight reduction.

A second important reason for weight reduction applies not only to the diabetic but to all obese individuals. That obesity is undesirable and in itself is harmful is borne out by discomfort to the patient of an increased intolerance to heat, shortness of breath upon exertion, an increased demand placed upon the heart, and an increased burden upon joints affected by hypertrophic arthritis. Statistics obtainable from life insurance companies reveal a substantial decrease in life expectancy with increasing degree of obesity.

To obtain the goal of a normal weight, complete cooperation of the patient must be present. If the patient refuses to follow instructions only failure will result. Too often the patient is blamed when actually the physician is responsible because of the vagueness of his instructions. It is his duty to explain in detail to the patient what his diagnosis is, what can be accomplished by proper treatment, and what the hazards of not following the prescribed program are. It is equally important to prove to the patient that there is nothing mysterious in his ability to lose weight. It is only a balance between caloric intake and caloric output. If a person ingests more calories than he

burns, a weight increase will result. Conversely, if a person ingests fewer calories than he burns, weight reduction must ensue.

There is some difference of opinion on how many calories these patients should be allowed, ranging from a low of 450 calories up to around 1400 calories daily. I allow my patients from 600 calories to 1000 calories, depending upon their physical activity. A favorite diet of mine consists of 805 calories, with 75 grams of carbohydrates, 70 grams of protein, and 25 grams of fat. This diet is deficient in certain vitamins and for that reason vitamin supplements are employed. To be most accurate the foods should be weighed. I have found that most of my patients are sufficiently accurate in the use of a measured instead of a weighed diet. It is most imperative that these diets should either be measured or weighed. Upon such a regimen the patient almost never needs insulin.

In summary, the rationale for weight reduction is due to the increase in glucose utilization when normal weight is attained and to the harmful effects of obesity per se.

The obese diabetic almost never needs insulin when proper dietary management is accomplished.

A proper diet consists of a measured or weighed diet containing from 600 calories to 1000 calories daily.

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It is often said that the death rate from tuberculosis is a delicate index of social progress. If this is so, one of the most striking features in the history of public health is the steady decline of both pulmonary and non-pulmonary tuberculosis during the past two generations. There are many factors responsible for this decline, including a higher standard of living, better housing and better education, but these are only contributory. It must never be forgotten that tuberculosis is first and last an infectious disease. Anything that increases the risk of infection will cause a rise in the incidence of the disease, and anything that diminishes that risk will result in a rapid improvement in the figures.

HYPOGLYCEMIA FOLLOWING PROTAMINE ZINC INSULIN

Report of Case

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The purpose of this paper is to discuss the nature of hypoglycemia produced by protamine-zinc insulin, and to call attention particularly to the damage to the central nervous system after severe and prolonged hypoglycemia. The important point seems to be the long duration of the reaction, with blood sugar below a critical level. Under such circumstances the cells of the brain, and possibly of the entire central nervous system, suffer degenerative changes that may be severe and permanent.

Plain insulin may produce severe hypoglycemia, but the reaction is usually sudden in onset, has a clear, characteristic pattern, is easily recognized, and, what is more important, is relatively short-lived, easily treated, and very seldom causes any permanent damage, or endangers life. Protamine-zinc insulin reactions, however, are apt to be quite prolonged, and may last 24 hours or more, if not treated. The onset is more gradual and subtle, and the blood sugar may fall to 50 or even 40 milligrams per cent before symptoms occur. Headache and nausea are the most common symptoms, and there may be weakness, mental confusion, loss of memory and finally coma, convulsions, and perhaps death.

In the treatment of coma from protamine-zinc insulin, it must be remembered that relatively large amounts of glucose are required and that glucose must be given again at intervals, until the prolonged action of the insulin has worn off.

Report of Case

J. B., aged 15, strong and well developed beyond his years, a known diabetic for one year, uncooperative and difficult to regulate, was admitted to a nearby hospital for regulation of his diabetes in June, 1943. One week later he left the hospital against advice, early one morning, after being given 100 units of protamine-zinc

insulin and drinking three ounces of whiskey. He ate no breakfast. Four hours later he was drowsy, and ate one piece of toast and one egg. Twenty-two hours after his insulin he was admitted to the R. F. Strickland and Son Memorial Hospital, Griffin, in deep coma. He was having hard convulsions every twenty to thirty minutes, each lasting five to fifteen minutes.

Respiration was quiet and slow. The skin was moist and clammy. Temperature was 100.3 per rectum. Pulse was rapid and small. Pupils were equal and moderately dilated, and reacted very sluggishly to light. The fundi were normal. Blood pressure: 80 systolic, 40 diastolic, and the heart sounds were valvular and over-active. Urine was scanty and normal. The white blood count was 11,500, and there were 93 per cent granulocytes and 6 per cent lymphocytes, with a moderate shift to the left. The blood sugar determination was 20 milligrams per cent, but when the reducing agents in the blood other than sugar were subtracted, his actual blood sugar was probably very near zero.

He received 75 grams of glucose and 1000 cc. of saline solution intravenously immediately, and 50 grams glucose and another 1000 cc. of saline in two hours. Four hours after admission his blood sugar was 125 milligrams per cent, and four hours later was 111. After he had been in the hospital 24 hours he had received 300 grams of glucose intravenously, and his blood sugar was 200. He continued in coma, however, and on the second day developed signs of lobar pneumonia, which was treated from the start with sulfadiazine.

His temperature was normal by the tenth day, although this was no doubt delayed by factors other than pneumonia. He was fed by Levine tube passed through the nose, and changed from side-to-side every few days. An indwelling catheter left in the bladder provided for urine specimens, and greatly aided nursing care, for he continued incontinent of urine and feces.

Convulsions continued hard and frequent for five days, becoming gradually less frequent and severe until the fourteenth day. Sodium amytal was used as needed, but with only moderate benefit. Magnesium sulphate and calcium gluconate were given intravenously, but did not lessen the attacks. Oxygen was given continuously by nasal catheter for the first three days, but no obvious effect on convulsions was noted. Cyanosis, however, was much less.

On the twelfth day he moved his arms and legs, but made no response to his environment. He became more and more restless, and by the twenty-sixth day required increasing doses of sodium amytal to relax him. Eyes were staring and unresponsive to light or motion. The limbs were somewhat spastic, movements were purposeless and restless, and he developed a loud groan. Deep reflexes seemed equal and normal. Plantar reflexes were normal and there was no clonus. Spinal fluid on the fifth day contained no increase in cells or protein and the sugar content was 200 milligrams per cent. Blood and spinal fluid Kahn tests were negative.

On the twenty-ninth day he was dismissed from the hospital to be cared for at home, still with the Levine tube and urethral catheter in place. Sulfadiazine in small doses controlled bladder infection. He received 60 units of protamine-zinc insulin once daily and 10

units of plain insulin before breakfast and supper.

On the thirty-fifth day he began swallowing, and the Levine tube was removed. He remained incontinent until the hundred and thirty-fifth day. On the fifteenth day of August, the forty-fifth day of illness, he began laughing; during the latter part of August he was placed in a rolling chair. The last of September he began walking with help. In November he showed the first sign of returning intelligence by grunting and pointing at objects. On December 14 he began saying a few words, and soon recognized friends and relatives.

At the present time, ten months after onset, he looks to be in excellent physical health, but seems to have the mentality of a three-year-old child. It is possible that aphasia may account for part of his mental picture. He cannot read nor spell. The pupils are equal and react to light. Hearing is normal. Sight is apparently normal. The left arm and shoulder show very slight muscular atrophy. Only during the past month has he used the left arm for voluntary movement and the muscles are slightly spastic. Deep reflexes seem equal on the two sides. There is slight awkwardness of the left leg, but no spasticity or reflex changes. Improvement has been very slow, but progressive, and seems to be continuing. Since his last check-up, it has been learned that he is making further efforts to use his left arm and has learned to ride his bicycle.

Comment

The exact level of the blood sugar at which coma occurs is not definitely predictable, since it may vary in different individuals; in fact, it may vary from time-to-time in the same individual. The critical level for coma, however, is usually around 30 milligrams per cent. or below.¹

In the treatment of psychoses with insulin shock it has been customary to allow coma to continue for one to one and a half hours. If it is prolonged very much beyond this point, experience has shown that "irreversible coma" frequently follows. This indicates damage to brain tissue, and when this occurs, full recovery does not follow the administration of glucose.² The longer the blood sugar remains below the critical level, the more damage is suffered by the brain cells.

It is generally conceded that brain damage in hypoglycemia is due to an interference with oxidation, and convulsions in these cases would seem to be in the same category with other anoxic convulsions.¹ Experimental investigation has shown that the brain tissue of animals who have been given insulin to the point of coma and convulsions, does not utilize as much oxygen as does normal brain tissue³. Moreover,

it has been proven that complete deprivation of oxygen may lead to death of the cells⁴.

Histologic investigation of brain cells of patients and animals subjected to large doses of insulin frequently offers a picture which strongly resembles the degenerative changes in ganglion cells observed after anoxia and after carbon monoxide poisoning⁵. It has been reported that in rabbits the administration of insulin in doses comparable to those given in treatment of schizophrenia leads to degeneration and necrosis of the ganglion cells of the brain⁶.

It must be stressed that the time factor is important. It would seem that insulin coma should be recognized as soon as possible and glucose given immediately, by mouth or intravenously. If deep coma is allowed to continue more than two hours, damage may occur to brain tissue which may be permanent. The longer coma continues, the greater the chances of brain damage.

The exact dosage of insulin necessary to cause prolonged coma and convulsions cannot be stated with exactness. In the treatment of schizophrenia with plain insulin, it has been found that the amount of insulin required to produce coma varies from 15 to 450 units. The dose required usually increases as treatment continues. It may be assumed that diabetic patients taking large doses of protamine-zinc insulin are apt to have serious reactions, although smaller doses might cause damage if food is not taken.

A word must be said about the prevention of protamine-zinc insulin reaction. This requires careful explanation and instructions to the patient. If there is nausea or any reason that food cannot be taken, insulin should be omitted. If the insulin has already been given, and food cannot be retained, orange juice or sugar should be taken, if possible, at two-hour intervals, and the physician should be notified immediately. If the patient is aware of the danger, severe reactions can be prevented in most cases.

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THE DIFFERENTIAL DIAGNOSIS OF ANTERIOR CHEST PAIN

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The diagnosis of severe anterior chest pain is frequently an emergency problem and not infrequently rests solely on subjective phenomena, whereas the diagnosis of the various conditions causing abdominal pain is more accurate because abdominal operation may be performed and the patient's symptoms and signs correlated with operative findings. The final diagnosis of a severe, obscure chest pain can at times be made only at autopsy, and therefore it is important to interpret correctly the symptoms presented. A patient suffering the anginal syndrome of coronary sclerosis may not show any abnormal physical signs, electrocardiographic changes, or roentgenographic evidence of the disease. Under

such circumstances, the recognition of this disease must be established by careful evaluation of symptoms and the elimination of other conditions that simulate it.

The subjective phenomena of angina pectoris vary in different individuals. Most victims of the disease describe the chief symptom as a "terrible pain." Others complain of a feeling of constriction or pressure in the chest with a sensation of choking or smothering. A few speak of a burning sensation or shortness of breath. These variations in the subjective manifestations of the disease depend upon the degree of stenosis present in the coronary arteries and the differences in patients' appreciation of the painful sensation.

The anginal syndrome usually appears when additional work is required of the heart. These overloads may be the result of physical exertion, emotional stress, overeating, flatulence, tenesmus, and so forth. The pain may last from fifteen to thirty minutes and frequently disappears promptly when the patient rests, eructates gas, or takes one of the nitrites.

Coronary Thrombosis

Coronary thrombosis is the most important disease to be differentiated from angina pectoris, and for this reason the following diagnostic table of Brill¹ is presented:

<i>Symptom or Sign</i>	<i>Angina Pectoris</i>	<i>Acute Coronary Occlusion</i>
Character of pain	Same	Same
Provocative factor	Usually present	Usually absent
Location of pain	Upper or middle sternum	Lower part of sternum
Behavior	Immobile	Restless
Duration of pain	Minutes	Hours or days
Effect of nitrites	Relief	No relief; may be harmful
Nausea and vomiting	Absent	Usually present
Dyspnea	Usually absent	Usually present
Collapse	Usually absent	Usually present
Acceleration of pulse rate	Usually absent	Usually present
Blood pressure	Usually slight rise	Usually falls
Fever and leukocytosis	Absent	Present
Sedimentation rate	Normal	Increased
Electrocardiographic changes	May be present	Usually characteristic
Pulmonary edema	Absent	May be present
Pericardial friction rub	Absent	May be present
Embolic phenomena	Absent	May be present

In uncomplicated cases of coronary sclerosis (angina pectoris), the characteristic myocardial lesion is a myofibrosis. Coronary sclerosis is so frequently associated with hypertension that, in many cases in addition to myofibrosis, cardiac hypertrophy may be found consequent to the hypertension. Uncomplicated coronary sclerosis does not present a large heart and when marked cardiac enlargement occurs, it is evident that the patient has had hypertension or that a healed infarct is present.

A patient suffering from myocardial anoxemia may complain of pain, as Harrison² has aptly put it, "anywhere between the nose and the navel." This being the case, it may be simulated by a great many diseases.

Diseases of the Aorta

As a rule, aortic stenosis, aortic insufficiency, luetic aortitis, or gradual narrowing of the orifices of the coronary arteries are not painful. A dissecting aneurysm of the root, or the arch, or the ascending aorta will cause a sharp retrosternal pain which may radiate into the neck or into the back at the level of the 4th or 5th thoracic vertebra.

Pain in the chest, dyspnea, asthenia, and relatively low blood pressure occur in both coronary thrombosis and aortic aneurysm. A unilateral weak pulse which is also a delayed pulse is often a striking sign of aneurysm. In the absence of well-marked hypertension, a greatly accentuated aortic second sound may be considered a sign of aneurysm. A positive blood Kahn test, abnormal pulsations or characteristic roentgenographic shadows are findings which greatly strengthens the diagnosis of aortic aneurysm. There is no pathognomonic electrocardiogram of aortic aneurysm.

Neurocirculatory Asthenia

This condition has recently been defined by Paul White³, as follows: "Neurocirculatory asthenia is a condition of ill health characterized by a group of symptoms consisting of dyspnea (often with sighing respiration also), palpation, precordial pain (more often an ache), exhaustion, dizziness, nervousness, and sometimes tremor, sweating, headache, and syncope, aggravated by

effort or excitement, and attending or following infection or physical or nervous strain, especially in "hypersensitive" individuals, who in extreme cases may show the condition more or less constantly with little or no provocation." It has also been called the effort syndrome, athlete's heart, or soldier's heart. Its pathogenesis is unknown, but it is probably a disorder of the vegetative nervous system brought on by physical or nervous exhaustion in individuals suffering an anxiety neurosis and infectious disease. Its chief symptom is breathlessness. The second most important symptom is an aching precordial pain which does not radiate and is not relieved by nitroglycerine, but may be relieved by a simple sedative, if strong suggestion is also used. These patients usually present other signs of psychoneurosis, such as excessive axillary perspiration, moist palms of the hands, and a coarse tremor of the fingers. The chest pain is constant and does not cease when the exertion is discontinued, as is the rule in angina pectoris.

The respiratory excursions deepen and may vary between 30 and 70 per minute, following the standard hopping exercise test. The heart rate during sleep is normal, but is usually elevated when the patient is only resting. The systolic blood pressure may be moderately raised above the expected normal, but the size of the heart as well as the electrocardiogram is normal. Chronic focal infections are frequently associated with this syndrome and, if these be found and eradicated, a complete cure may be effected.

Pleuropericarditis

Pericarditis becomes painful only when there is involvement of the diaphragmatic or mediastinal pleura. The pain may be sharp and retrosternal, and referred to the epigastrium or the left shoulder, or it may be a continuous precordial ache. Acute pericarditis, when due to rheumatic fever, tuberculosis, or effusion, could hardly be confused with coronary thrombosis, but acute pleuropericarditis following an acute respiratory infection or a surgical procedure may resemble coronary thrombosis very closely, both being associated with

chest pain, fever, leukocytosis, friction rub, fall in blood pressure, and frequently similar electrocardiographic changes. It may be differentiated from coronary thrombosis by the stabbing quality of the pain, its intensification during inspiration, and the absence of stenocardia. Serial electrocardiograms showing an early return of the inverted T-waves to normal would correctly establish the diagnosis.

Pulmonary Embolism

Pulmonary embolism occurs more frequently in men than women, the ratio in 53 cases studied by Middleton⁴ being 3.4:1, which is about the same proportional incidence as coronary thrombosis. Although occasionally a postoperative complication, it occurs most frequently during the course of arteriosclerotic heart disease and rheumatic heart disease. It may also result from peripheral or pelvic phlebitis in diseases requiring prolonged bed rest.

It is at times very difficult to distinguish between pulmonary embolism and coronary thrombosis with infarction of the posterior wall of the left ventricle. The classical symptoms of pulmonary embolism are sudden dyspnea, epigastric or retrosternal pain, hemoptysis, cough, and the symptoms of shock. When hemoptysis and cough are absent, the clinical picture is almost identical with that produced by coronary thrombosis. The physical signs of importance are rales and dull percussion over the affected lung area, cyanosis, jaundice, pleural friction, reduced breath sounds and increased pulse rate. The sudden occlusion of a large branch of the pulmonary artery is usually fatal.

Since 1935 it has been possible to differentiate pulmonary embolism from coronary thrombosis by means of the electrocardiogram. The typical electrocardiographic changes occurring in pulmonary embolism are a relatively deep S-wave in Lead one, a well defined Q-wave and an inverted T-wave in Lead three, and an inverted T-wave in Lead CR-2. The T-waves of the precordial leads (IV-R CR-2 and Wolferth) are normal in uncomplicated posterior basal infarction of the left ventricle.

Esophageal-Hiatus Hernia

Ambroise Paré reported the first case of diaphragmatic hernia over three centuries ago, but it has been only during the last twenty years that the condition has been diagnosed with any degree of accuracy. The chief symptom is colicky pain which may be substernal and referred to the left shoulder and down the arm. In most cases the pain is epigastric and has a tendency to recur after a heavy meal. Other important symptoms are dysphagia, belching, and nausea with vomiting occurring usually when the patient is recumbent, and relieved by sitting up or lying on the right side.

This condition is more likely to be confused with angina pectoris, but it may resemble coronary thrombosis when the pain is epigastric or low substernal and severe. Willius⁵ states that 10 per cent of the cases of diaphragmatic hernia encountered at the Mayo Clinic have previously been diagnosed as heart disease.

A positive diagnosis of esophageal-hiatus hernia can be made only on radiographic evidence. The patient may have to be examined fluoroscopically in several positions and instructed to cough, strain the abdominal muscles, or take deep inspirations before the herniation is demonstrable.

Spontaneous Mediastinal Emphysema

The substernal pain occurring in this condition is usually very mild but may be very severe, depending upon the amount of air in the mediastinum, the age of the patient, and concomitant diseases. The pain may radiate to the shoulders, the neck, arms, or the back. There is no evidence of shock and the temperature, pulse, respiratory rate, blood pressure and leukocyte count are usually normal. The disease has been known to complicate severe bronchial asthma. Smith and Bowser⁶ reported two cases in the newborn with recovery. Pneumothorax often occurs and may go undiagnosed until a roentgenogram of the chest has been taken.

The most important diagnostic sign is a peculiar crackling precordial click, synchronous with each heart beat and occasionally heard during systole and diastole. The area of cardiac dullness is diminished

or completely obliterated, the dullness being replaced by a hyper-resonant percussion note.

The roentgenogram is a valuable aid in establishing the diagnosis. The prognosis is good in most cases. The retrosternal pain may resemble that of coronary thrombosis very closely.

Duodenal Ulcer

During the present era, which I call the "coronary era," we should be cautious in evaluating the symptom of "indigestion." Although in most cases of peptic ulcer we find the characteristic "hunger pains which are eased by the taking of food," there is the exceptional case in which the pain is felt in the chest and therefore confused with angina pectoris. Pylorospasm is the chief cause of the pain. It is produced by gastric stasis and distention, with fermentation of the retained stomach contents. There is usually a feeling of weight and pressure in the epigastrium and all symptoms are relieved by atropine and alkalies. The pain is not related to effort and comes on regularly soon after meals or between meals. The electrocardiogram will be normal and the roentgenogram should establish the diagnosis by showing the constant characteristic filling defect. The circumstances under which the pain occurs are frequently more important than the location and radiation of the pain.

Gallbladder Disease

Down through the ages the heart and the gallbladder have been referring pain to each other in the most confusing manner. The victims of gallbladder disease are usually middle-aged, obese men with a penchant for alcohol, tobacco, and rich food. Acute cholecystitis is more likely to be confused with angina pectoris than with coronary thrombosis. The right upper quadrant of the abdomen may be silent and the pain located in the epigastrium, the substernal or precordial areas, or rarely in the left subscapula region. There is usually a history of indigestion, flatulence, belching, nausea, and intolerance for fatty foods. The pain comes on two or more hours after meals, is not related to exertion, and usually lasts longer than one hour, if

untreated. The cause of the pain is probably pylorospasm and esophagospasm, with or without reflex vaso-constriction of the coronary arteries.

The physical examination frequently is negative except for moderate tenderness in the right upper quadrant and epigastrium. Distention of the stomach with air introduced through a duodenal tube will frequently reproduce the pain of pylorospasm and help establish the diagnosis. A positive cholecystogram and a negative electrocardiogram should prove valuable aids in establishing the final diagnosis.

Comment

I have made no attempt to present a comprehensive review of all the diseases which may cause pain in the anterior chest. The ten conditions selected for discussion were chosen because of the difficulty of differential diagnosis or because of their rather common occurrence.

A careful history and physical examination will always be the most important aids in diagnosis. Valuable information may be furnished by special laboratory procedures, but such findings must be closely correlated with the history and physical examination before the complete diagnosis can be made.

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DISCUSSION ON PAPERS BY DRs. FANCHER, HAMFF, WALKER AND BANCKER

Dr. E. F. Wahl (Thomasville): Dr. Walker's case report and his discussion of the case illustrates more clearly what can happen in the management of diabetes than any amount of discussion. I have always been afraid to use large doses of protamine-zinc insulin although many competent physicians do use large doses. Unfortunately, many diabetic patients, who are usually cooperative, occasionally disregard their usual precautions without the knowledge of the physician and serious results may occur.

I thoroughly agree with Dr. Hamff regarding the proper management of the obese diabetic. However, a few of my obese diabetics do require insulin. I wish we could stress the proper management of diabetes enough

so that physicians would not tell a patient to take one injection of protamine-zinc insulin daily and eat anything they want. Either many patients are misquoting their physicians or many physicians are giving this advice.

I wish to re-emphasize Dr. Fancher's warning to avoid being jockeyed into a position where one attempts to meet all the demands made by the public and as a result produce a poor quality of work. A physician can only do so much thorough work in a day and any beyond that is performed only at the sacrifice of the quality of all the work he produces. The increasing number of lay articles on almost every phase of medicine has resulted in many patients discussing their own diagnosis with their physician instead of giving him a history of their case. This unconscious coloring of the clinical picture is sometimes very confusing. In my own experience I have found that it is not always possible to make a correct diagnosis in chronic abdominal conditions without the use of every possible laboratory facility. For instance, many patients with peptic ulcer may not have the usual history of a peptic ulcer and others with a so-called typical history of peptic ulcer do not have an ulcer. The short-cut formula to estimate a metabolism, given by Dr. Fancher, is useful within certain limits in estimating hypothyroid states but I do not believe it can be applied to hyperthyroid states because any nervous condition would lead to false conclusions.

Dr. Bancker remarked that this is the coronary era. The accuracy of this statement is illustrated by the fact that at the present time we find a great many diagnoses of coronary disease where the condition does not exist, whereas fifteen years ago a great many patients had various other diagnoses where coronary artery disease was present. I cannot object too strongly to any physician's remark: "You have a little heart trouble but it doesn't amount to much and pay no attention to it." In that patient's subconscious mind will always be the thought that he does not have a normal heart and that anything might happen to him. In my opinion a physician does much less harm to the public by occasionally missing the diagnosis of a very early heart lesion than he would do if he made a diagnosis of heart disease in every patient who had any type of chest symptoms. I see many patients with anterior chest discomfort due to arthritis or myositis. As a rule, these patients are not acutely ill, the discomfort is not severe, and it is their thought that the discomfort might be due to their heart. I have seen a number of proven cases of coronary thrombosis with extremely cold hands during the height of the pain and the pulse ranging from 50 to 60 per minute. The hands would become warmer as the pain would subside and the pulse would become fast when the patient reached the stage of shock.

I wish to urge all of you to carefully read Dr. Bancker's discussion of neurocirculatory asthenia. Too many of these patients are being diagnosed as having organic heart disease. Very few young individuals have acute chest pain due to heart lesions. This is especially true in the ambulatory patient. I stress this point because we often see a teen age boy or girl with a diagnosis of heart disease, based on chest discomfort where

there is no disease of the valves, pericarditis, diabetes, syphilis or premature arteriosclerosis. I make electrocardiograms routinely on all gallbladder patients, even when the diagnosis of gallbladder disease is very definite. This is especially important when surgery is contemplated.

POLIOMYELITIS OF 1944

In the first 31 weeks of 1944, the United States has had more cases of infantile paralysis reported than at any comparable time shown on the records in 28 years. The National Foundation for Infantile Paralysis declared recently.

Latest figures from the U. S. Public Health Service, showing state reports through August 5, reveal a total of 3,992 cases, the National Foundation said. This is 1,226 cases more than reported for the same period last year when the nation suffered its third worst polio epidemic, and 1,089 cases more than in 1931 when the second worst outbreak was recorded. The records of the worst outbreak in 1916 show there were 6,767 cases by August 1 of that year.

In five states where the outbreaks are in epidemic or near-epidemic proportions, the total cases reported through August 5, 1944, are higher than those states reported for the entire year of 1943. They are:

State	Through Aug. 5, 1944	Entire year of 1943
New York	902	692
North Carolina	470	37
Kentucky	377	157
Pennsylvania	284	143
Virginia	205	61

The serious or threatening outbreaks this summer are confined almost entirely to states east of the Mississippi, while last year's were largely west of the river.

The National Foundation has sent epidemic aid, either in emergency funds, professional personnel or supplies and equipment, into 13 affected states. In addition to the five named above, they are: Ohio, Tennessee, Michigan, Mississippi, Indiana, Washington, Oregon and California. Outbreaks in the latter three states earlier this year have now waned.

Funds through which the National Foundation and its chapters carry on their work are supplied by the March of Dimes and similar activities held each January in the celebration of the President's birthday.

Experience has shown that it is often difficult — if not impossible — to obtain the examination of all individuals who are known to have had intimate contact with a newly discovered case of tuberculosis. This is particularly true of the older person who frequently refuses examination either because of apathy or because of fear that something will be found which will force him to change his mode of life.

THE PRESIDENT'S PAGE

FACING THE FACTS

It is desirable that the medical graduate continue his interest and enthusiasm in the study of the science and art of medicine through his entire professional career. Apparently few do in spite of all the efforts at graduate medical training. A philosopher said: "The most fearful thing in the world is an active ignorance," and nowhere does this apply with such emphasis as in the practice of medicine. This is generally recognized among us as shown by the numberless, excellent efforts at graduate study for the doctors. These have been more futile than successful. The difficulties the individual meets in keeping reviewed and up-to-date in medicine are enormous. "There is no royal road to learning" is as applicable here as to those who first heard it propounded. In spite of all efforts graduate study so far has failed to reach the vast majority of us who need it most.

If we are to keep well informed in medicine our study must be a continuous every day affair because of the ever new improvements and discoveries, and because of the rapidity with which we forget. Information not often used, nor reviewed, becomes more and more dim with the passing of time, and finally is completely effaced; and so the school teacher is required to go back to school every third year. Is the doctor's memory fundamentally different from hers? Shall we wait until we, too, are *required* to go to school again?

If the material published in *The Journal of the A. M. A.* were studied every week as it comes, it would keep the doctor reviewed and up-to-date with most all that is new and worth while in medicine. Then let us have a State-wide Graduate Study based on this material and administered by the Medical Association of Georgia with benefit to the doctor, the patient, and to

organized medicine. "Lots of work," you say. Yes, but we are not traveling a "Royal Road." Secretaries could be trained to evaluate the abstracts of the articles and discussions sent in by the doctor. Credit would be given the doctor for attendance and participation in any medical meeting, any paper he wrote, any formal graduate study done, and for every effort he made toward "keeping up" in medicine. Then quadrennially, a graduation night at the annual meeting of the Association. The widest publicity would be given to it; and our Honorary Committee would confer a diploma on each doctor who has done the minimum amount of work required. Would he come to get his diploma? Would he feel good when his state and county papers published the incident? We remember that most pleasant moment when it was said to each of us: "I confer upon you the degree of Doctor of Medicine with all of its rights and privileges." We can again experience that pleasure, and to the benefit of all concerned, including the medical schools.

The scheme suggested would be equally available to every doctor no matter where located. It would require the least effort and expense, and the least time away from practice; yet it would keep the doctor constantly making some effort at keeping informed in medicine, and that is the important thing: information equals interest: interest develops initiative.

The quadrennial recognition would be an incentive, bringing into the Association enthusiasm and cooperation. It would be more than a challenge to those inclined to do no studying nor reading—it would have something of a gentle "compulsion." Let us face the facts. If anyone has a better scheme, bring it out and let's go.

CLEVELAND THOMPSON, M.D.

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DESK DRAWERS

A few days ago I was asked to write something for the editorial pages of *THE JOURNAL*. I wondered what to write about that might be of interest other than war or socialized medicine. At this point I pulled open my desk drawer seeking a pad and pencil with which I hoped to record some vague thoughts, when several articles came into view which had been overlooked for a long time. At different times they had meant much to me, and something to many others.

As I gazed into that drawer which had been hastily opened and closed many times a day without thought, I wondered about doctors' desks and their contents. On this quiet Sunday morning I am alone with doors locked, so I do not have to hurry. Take a peek with me.

The first souvenir that comes into view is a piece of airplane wing, the first one to bring mail to Albany. That plane circled the high school baseball park while people, gathered in the stands for the occasion, waited and wondered. The pilot missed the top of the fence by inches as he came in and landed at first base, crossed the pitcher's box, third base, and crashed through the fence in foul territory, splintering his right arm and the plane's wings.

The second article was my first eyeglasses, purchased at the age of 36 through a classmate who examined my eyes because I complained of *muscae volitantes*, a new personal experience. He told me that glasses might be of benefit but he doubted it. I had forgotten both the glasses and the M. V. unless I looked for them.

Further inspection brought to light notes on the first clinic organized in Albany. It was held at the request of a Negro women's club in a church. Seventy-five children were examined before one was found who had

had a tonsillectomy, which had been done in Atlanta before the child moved to Albany. This experience led to the suggestion that the Albany Kiwanis Club organize a clinic for underprivileged children. During the past twenty-one years several thousand white and colored children have received treatments at this clinic.

Reaching back in the drawer, notes were found on the Dougherty County Malaria Control, the first county-wide plan ever started. Dr. L. L. Williams, head of the Department of Malaria Control of the United States Public Health Service, made two trips from Washington, D. C., to Albany within ten days to help us get started, then sent two health experts to assist health authorities in Georgia and Dougherty County, and compiled statistics, the first ever recorded on county-wide malaria control. Dr. Williams is now medical officer in charge of the Fourth Corps Area and is stationed in Atlanta. Malaria control has caused visitors to come to Dougherty County from many foreign countries and from hundreds of counties in the states to study control measures. I have not seen a case of malaria in Albany in three years.

At the very back of the drawer I see a five-cent red-backed notebook which contains remarks made by some of my teachers during lectures, and quite a number of prescriptions that were true and tried. I believe some are still used. Dysmenorrhea, rheumatism, urticaria and cough all were discussed, demonstrated, and prescribed for on the first four pages. Then followed in rapid order, conjunctivitis, hemorrhoids, loss of appetite, bronchitis, pneumonia, torpid liver, toxemia of pregnancy, gonorrhea (Rx. oils balsam, sandalwood and cinnamon in mucilage of acacia), heart disease, impotence, tonics in tuberculosis, cholera morbus, and Dr. Bluff's (bless his memory) Rx. Fe. cascara and mist. rhubarb and soda.

And so on, including prescription of purgatives, treatment of acute and chronic anterior poliomyelitis, chorea, etc., and an aphrodisiac prescription by dear old dad—surely we admit progress.

J. A. REDFEARN, M.D.

HOUSE CLEANING

Far be it from me to set up criteria by which individual members or groups of our profession should be judged. Thirty-four years of practice with a little bit of look and listen has made me stop and wonder why.

Why does the prestige of our profession at times seem to be on the wane?

Why the cry of inadequate medical care for the masses?

Why has our profession been compelled to be on the defensive?

These and many more such vital questions arise.

If reason rather than intuition and emotions guided both the lay public and the profession, we might sit down at the conference table and adjust some of these difficulties with mutual advantage to all.

The many intricate problems which, in some instances, are individual rather than collective make the solution more difficult.

Much of the criticism directed at the profession is individual, because it deals with personal matters more than inadequate medical care.

Selfishness often guides us in our acts. Money is one of the matters that causes critical discussion of the lack of medical care. Lack of full expression or honest dealing with our clientele should be remembered. No patient objects to payment for services rendered. Few, if any, object to the truth.

Often a patient is subjected to a painstaking examination, including much laboratory work which may or may not be indicated. Even though the laboratory report may not show abnormalities, this is of much import to the patient. But has he or she been educated to accept this as his or her part of the cost of medical care?

Happiness should prevail and good relationships be kept between patient and doctor, but when a bill for \$75.00 or \$100.00 is received good feelings often cease because of misunderstandings.

The question arising here is whether in every case one is justified in making elaborate examinations. Yes, I admit it is good medicine and occasionally something of

importance is missed unless this is done, but does the patient understand the extreme value of a negative report and the payment for same?

Are we too apt to rely on the physical means for determination of a diagnosis, with all kinds of laboratory procedures, and neglect the history which when carefully elicited may often make the diagnosis?

Do we frequently make capital out of such things as "low blood pressure" and give "shots" for same? I know an active physician in Atlanta that works almost incessantly, whose age is 48 and who has never been ill, and his systolic blood pressure has seldom been 100 or over. No shots for him!

Do surgeons habitually give intravenous glucose as postoperative treatment without good reason and hence increase the punishment and cost to the patient?

Do oto-rhino-laryngologists have patients with acute respiratory infections return to their office daily for treatments of sprays, etc., while the patient runs a high temperature? Would not this patient profit by a stay in bed and the use of simple procedures at home?

Do many practitioners attempt to satisfy the whims of patients by the use of sulfa drugs in conditions that do not respond to their use? A request for penicillin was sent to the drug room of one of our hospitals with the diagnosis of miliary tuberculosis on the requisition!

Now, the physician should have known that this was utterly useless since all of the literature warns that it is of no value in tuberculosis. Again, a useless expenditure of money.

Why is it so important that some physicians make daily visits to patients with chronic illnesses, such as paralytics, and others will make only weekly visits or go on call?

The public has become "specialist conscious" and often demands such treatment when it is not necessary. But is it not our duty to so instruct these people so that they could not justify their complaints of the high cost of medical care?

Probably 90 per cent of doctors, preachers, and business men are inherently hon-

est, but the acts of the other 10 per cent bring condemnation on the heads of all. Could we not have some spirit and plan of cooperation among our own members for policing "our own gang?" The recent exposure in New York City of such a large group of doctors engaged in the industrial insurance racket is enough to make the public wonder, and wonder again if the racket may not prevail everywhere.

Too frequently I see patients who have been told they had a "bronchial condition" and the physician in charge is fully cognizant that the diagnosis is tuberculosis, because he has received a positive sputum report and an x-ray diagnosis. Isn't this bordering on criminal negligence? Well, it can't be attributed to ignorance.

A prominent official of a large corporation recently stopped me on the sidewalk to discuss the issuance of certificates by physicians. Such statements were to the effect that the health of the family in question was greatly jeopardized by the use of a certain type of furnace, therefore it was imperative, according to physician's certificate, that said family must immediately have another type of furnace for preservation of life or something to that effect. This gentleman said this was a daily occurrence and many such statements were lying on his desk for clearance. Are we sincerely honest with ourselves and our clientele when we permit ourselves to be subjected to criticism by the doubt of this being a statement of facts? This certificate business is rapidly approaching the racket stage.

These are but a few of complaints heard, but they represent a cross-section sufficient to make us think and begin to clean house.

The late Billy Sunday said that sinners kept credit and debit columns, and if the sinner did one more good act than bad he thought he was justly due a place in Heaven. As with the sinner, this bookkeeping system for ourselves does not warrant immunity to attack.

The physicians' contribution to human welfare has been great, and their voluntary effort in behalf of suffering humanity during this world conflict has been put forth without any hope of personal reward. Let's

make every effort to maintain the respect we justly deserve.

This is an attempt to call attention to some of the things that perhaps only a few are guilty, but it is a word of warning issued in the belief that we can win the battle if each of us will participate in a program of housecleaning by beginning at home. Yes, brother, this includes me. My profession comes next to my love for God, country and family. May we keep our profession great and honorable should be our prayer.

C. C. AVEN, M.D.

DEATH RATE AMONG WOUNDED SOLDIERS REACH NEW LOW

A consoling fact for the mothers, fathers and loved ones of U. S. fighting men is the dramatic development of surgery which has reduced the death rate of war wounded in Army and Navy hospitals to 3 per cent against 8 per cent in World War I, Dr. Irvin Abell, chairman of the board of regents of the American College of Surgeons, told a nation-wide radio audience.

Speaking on the "The Doctor Fights" program (August 1) dedicated to the medical profession, the distinguished Louisville, Kentucky, surgeon cited the vast advancements in surgical technics during the present century which have resulted in far greater chances for the wounded to be restored to sound health.

"Many a wounded man who would have been long invalided or permanently disabled in 1919 is quickly and completely healed in 1944," Dr. Abell declared. He added that the medical profession is "justly proud" of this improvement in surgery's ability to counteract the ravages of war.

Powerful bactericidal drugs, such as penicillin, were described by Dr. Abell as spectacular aids to the more efficient surgeon of today. "There is no organ or cavity in the body which today may not be rid of its disease by surgical attack," he said.

Dr. Abell stated that the profession has taken steps to assure competent service to the public by imposing a voluntary requirement of from four to eight years of post-graduate training for surgeons after they attain the degree of doctor of medicine.

WOMAN'S AUXILIARY : OFFICERS 1944-45

President—Mrs. W. T. Randolph, Winder.

President-Elect—Mrs. Lucius N. Todd, R. F. D. No. 2, Augusta.

First Vice-President—Mrs. Edgar H. Greene, 1442 Wesley Road, Atlanta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Leonard Massengale, Lumpkin.

Recording Secretary—Mrs. Charles Usher, 6 East Liberty St., Savannah.

Corresponding Secretary—Mrs. Alex Russell, Winder.

Treasurer—Mrs. Ralph Fowler, Marietta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. Charles Daniel, College Park.

PRE-CONVENTION BOARD MEETING

May 9, 1944

The Executive Board of the Woman's Auxiliary to the Medical Association of Georgia met on Tuesday, May 9th, at the DeSoto Hotel, Savannah, with Mrs. Olin S. Cofer, Atlanta, President, presiding.

The meeting was called to order at 5:45 P.M. The Lord's Prayer was said in unison.

The minutes of the Council and Executive Board meeting, the joint meeting of the Health Education, Visual Education and Public Relations chairmen and the Post-Convention Board meeting were read and approved.

Mrs. Robert E. Leonard, Augusta, moved that the Visual Education Fund of \$62.00 be transferred to the general fund; seconded by Mrs. Wallace Bazemore. Motion carried.

The questionnaire for the Brawner Cup Award was discussed. Mrs. Olin S. Cofer announced that she would like to present the Auxiliary with an award to be given each year to the auxiliary performing the most outstanding piece of work, this trophy to be known as the Achievement Award.

Mrs. J. Lon King moved that the Auxiliary accept the award so graciously given by Mrs. Cofer; seconded by Mrs. Cleveland Thompson, and motion carried.

Mrs. Cleveland Thompson on behalf of the Auxiliary expressed appreciation to Mrs. Cofer for gift of the award.

Mrs. H. G. Banister, Ila, moved that as a post-war project the Student Loan Fund be continued; seconded by Mrs. Ralph Fowler and motion carried.

Mrs. H. G. Banister moved that the proper procedure of the Student Loan Fund be left to the new Student Loan Fund Committee. Motion seconded by Mrs. L. W. Williams, Savannah, and carried.

A Nominating Committee was elected as follows:

Mrs. H. G. Banister, Ila; Mrs. J. Lon King, Macon; Mrs. Ralston Lattimore, from the Executive Board; and Mrs. Harry Kandel, Savannah; Mrs. Allen H. Bunce, Atlanta; Mrs. Y. H. Yarbrough, Milledgeville; Mrs. D. H. Garrison, Clarkesville, from the membership-at-large.

The President appointed the following committees:

Auditing Committee—Mrs. W. A. Selman, chairman; Mrs. Ralph Chaney, Mrs. Ralph Fowler.

Resolutions Committee—Mrs. J. N. Brawner, chairman; Mrs. W. T. Randolph, Mrs. L. W. Williams.

Courtesy Committee—Mrs. Wallace Bazemore, chairman; Mrs. Cleveland Thompson, Mrs. W. D. Hall.

Judging Committee—Mrs. J. Lon King, chairman; Mrs. E. N. Gleaton, Mrs. Lee Howard.

The meeting adjourned at 6:50 P.M.

TWENTIETH ANNUAL CONVENTION

First Session

May 10, 1944

The 20th Annual Convention of the Woman's Auxiliary to the Medical Association of Georgia was called to order by the President, Mrs. Olin S. Cofer, at the DeSoto Hotel, Savannah, Ga., May 10th, at 9:30 A.M.

The invocation was offered by Dr. Leroy G. Cleverdon, Paston, First Baptist Church, Savannah. Welcome to the guests was expressed by Mrs. Robert V. Martin, President, Woman's Auxiliary to the Georgia Medical Society. Mrs. Hal Davison, Atlanta, responded.

The following distinguished members and guests were introduced by Mrs. Ralston Lattimore:

1. Mrs. Olin S. Cofer, Atlanta, President of the Auxiliary to the Medical Association of Georgia.
2. Mrs. Eben J. Carey, Wauwatosa, Wis., President of Auxiliary to American Medical Association.
3. Mrs. John P. Helmick, Fairmont, W. Va., President of the Auxiliary to the Southern Medical Association.
4. Mrs. Eustace Allen, Atlanta, 1st Vice-President of Auxiliary to the American Medical Association.
5. Mrs. W. T. Randolph, Winder, President-Elect of the Auxiliary to the Medical Association of Georgia.
6. Mrs. W. A. Selman, Atlanta, wife of the President of the Medical Association of Georgia.
7. Mrs. Cleveland Thompson, Millen, wife of the President-Elect of the Medical Association of Georgia.

8. Mrs. J. N. Brawner, Atlanta, Honorary President of the Auxiliary to the Medical Association of Georgia.

9. Mrs. Robert V. Martin, Savannah, President of the Auxiliary to Georgia Medical Society.

Past Presidents—Mrs. Ralston Lattimore, Savannah; Mrs. W. R. Dancy, Savannah; Mrs. Ralph Chaney, Augusta; Mrs. Lee Howard, Savannah, Past President and Parliamentarian; Mrs. H. G. Banister, Ila, Past President and chairman of Student Loan Fund; Mrs. J. Lon King, Macon, Past President and chairman of Brawner Trophy.

State Officers—1st Vice-President, Mrs. Ralph Fowler, Marietta; 2nd Vice-President, Mrs. L. W. Williams, Savannah; Recording Secretary, Mrs. Charles Usher, Savannah; Treasurer, Mrs. Lucius N. Todd, Augusta.

Dr. W. A. Selman, President of the Medical Association of Georgia, addressed the Auxiliary on "Commando Marys' in Auxiliary Work."

Dr. J. N. Brawner, chairman, gave a report of the Advisory Committee to the Woman's Auxiliary.

Mrs. John P. Helmick of Fairmont, W. Va., President of the Woman's Auxiliary to the Southern Medical Association, spoke on the work of the Auxiliary in war time.

Mrs. Emerson Ham, chairman, introduced the following who will serve as pages for the convention: Mrs. Shirley Winder, Mrs. G. Hugo Johnson, Jr., Mrs. A. Leon Holloman, Mrs. John Howard, Mrs. Stephen Lange and Mrs. D. R. Keating.

Mrs. Lee Howard, Parliamentarian, read the rules governing the convention, which were adopted as read.

Mrs. Ralston Lattimore and Mrs. Charles Daniel served as timekeepers.

The minutes of the Pre-Convention Executive Board Meeting were read as information. Mrs. L. W. Williams gave the plans for entertainment.

Reports were given from the following districts and counties:

5th District—Mrs. Don C. Cathcart

6th District—Mrs. B. L. Helton

7th District—Mrs. W. D. Hall

Baldwin County—Mrs. Sam Anderson

Bibb County—Mrs. J. Lon King

Bulloch-Candler-Evans Counties—Mrs. A. J. Mooney, Sr.

Chatham County—Mrs. R. V. Martin

Clark-Oglethorpe-Oconee-Madison Counties—Mrs. W. H. Birdsong

Cobb County—Mrs. W. H. Perkinson

Fulton County—Mrs. Eustace Allen

Glynn County—Mrs. J. W. Simmons

Habersham County—Mrs. D. H. Garrison

Richmond County—Mrs. Robert E. Leonard

Ware County—Mrs. W. M. Flanagan

Washington County—Mrs. B. L. Helton.

Mrs. Harry Kandel gave the following registration report:

Total registration	131
State Officers	7
State Chairmen	10
Past State Presidents	8
District Managers	1
County Presidents	4
Delegates	17
Guests	5
Members	79

The following recommendations from the Executive Board were adopted:

That the Visual Education Fund of \$62.00 be transferred to the general fund.

That the Auxiliary accept the award given by Mrs. Olin S. Cofer, this award to be known as the Achievement Award and to be given each year to the auxiliary performing the most outstanding piece of work.

That as a post-war project the Student Loan Fund be continued.

That the proper procedure of the Student Loan Fund be left to the new Student Loan Committee.

The President announced the election of the following committees:

Auditing Committee—Mrs. W. A. Selman, chairman; Mrs. Ralph Chaney, Mrs. Ralph Fowler.

Resolutions Committee—Mrs. J. N. Brawner, chairman; Mrs. W. T. Randolph, Mrs. L. W. Williams.

Courtesy Committee—Mrs. Wallace Bazemore, chairman; Mrs. Cleveland Thompson, Mrs. W. D. Hall.

Nominating Committee—Mrs. H. G. Banister, chairman; Mrs. J. Lon King, Mrs. Ralston Lattimore, Mrs. Harry Kandel, Mrs. Allen H. Bunce, Mrs. Y. H. Yarbrough, Mrs. D. H. Garrison.

Awards Committee—Mrs. J. Lon King, chairman; Mrs. E. N. Gleaton, Mrs. Lee Howard.

Mrs. J. N. Brawner moved that the Auxiliary send a note to Mrs. W. H. Myers expressing regret at her absence; motion carried.

Mrs. Ralston Lattimore moved that the Achievement Award be given this year. Motion seconded and carried.

Mrs. W. R. Dancy moved that we send a note of sympathy to Mrs. H. H. Askew on the loss of her husband. Motion seconded and carried.

Mrs. J. N. Brawner moved that we send a note of sympathy to Mrs. W. T. Wooten on the loss of her husband, who at the time was President of the Southern Medical Association. Motion seconded and carried.

There being no further business the meeting adjourned at 12 noon.

MRS. OLIN S. COFER,
President.

MRS. CHARLES USHER,
Recording Secretary.

TWENTIETH ANNUAL CONVENTION
Second Session
May 11, 1944

The second session of the 20th Annual Con-

vention of the Woman's Auxiliary to the Medical Association of Georgia was called to order by the President, Mrs. Olin S. Cofer, at 9:30 A.M. Thursday, May 11, 1944. Father George Daly, from the Cathedral of St. John the Baptist, offered the invocation.

The address of welcome was given by Mrs. Harry Kandel of Savannah, with Mrs. T. V. Willis, Brunswick, responding.

The minutes of the first session were read and approved.

Dr. Cleveland Thompson, Millen, who was introduced by Dr. W. R. Dancy, of Savannah, as the President-Elect of the Medical Association of Georgia, spoke to the Auxiliary on "What the Auxiliary Means to the County Medical Society."

Mrs. Eben J. Carey of Wauwatosa, Wisconsin, President of the Woman's Auxiliary to the American Medical Association, talked to the Auxiliary on the "Responsibility of the Auxiliary Today."

A note of thanks was read by the Secretary from Mrs. John E. Brickman, mother of the late Mrs. J. Bonar White, a Past President of the Auxiliary, for flowers sent on the death of Mrs. White.

Mrs. S. F. Rosen conducted memorial services in memory of Mrs. Guy T. Bernard, Augusta; Mrs. H. R. Ingram, Coleman; Mrs. R. A. Redmond, Savannah, and Mrs. J. Bonar White, Atlanta.

A report of the meeting of the Auxiliary to the American Medical Association was read by Mrs. Allen H. Bunce, and Mrs. Charles H. Daniel reported on the meeting of the Auxiliary to the Southern Medical Association.

Mrs. Olin S. Cofer, President, gave her report of the year's work. Mrs. Ralph Fowler moved that the Auxiliary thank Mrs. Cofer for her splendid report; seconded by Mrs. G. H. Johnson and motion carried.

Committee reports were as follows:

Mrs. W. T. Randolph, President-elect—Organization.

1st Vice-President, Mrs. Ralph Fowler—Health Education.

2nd Vice-President, Mrs. L. W. Williams—Hygeia Chairman.

Recording Secretary—Mrs. Charles Usher.

Treasurer—Mrs. Lucius Todd.

Parliamentarian—Mrs. Lee Howard.

Public Relations—Mrs. Wallace Bazemore.

War Participation—Mrs. J. N. Brawner, Jr.

Research and Romance of Medicine—Mrs. Cleveland Thompson.

Student Loan Fund—Mrs. H. G. Banister.

Jane Todd Crawford Memorial—Mrs. Claude C. Mitchell.

Mrs. Lee Howard moved that we send \$5.00 to the Jane Todd Crawford Memorial Fund; seconded by Mrs. G. H. Johnson, Sr., and motion carried.

Mrs. J. Lon King, Chairman of Awards, announced that the White Scrapbook Award of \$5.00 goes to Baldwin County Medical Auxiliary and honorable mention to Fulton County Medical Auxiliary, and the White Exhibit Award of \$5.00 to Richmond County Medical Auxiliary, and honorable mention to Ware County Medical Auxiliary. Mrs. King also announced that the Mrs. James N. Brawner Trophy had been won by Ware County Medical Auxiliary with an average of 95 per cent, honorable mention goes to Baldwin County Medical Auxiliary with an average of 92½ per cent. The Achievement Award goes for the first time to Fulton County Medical Auxiliary.

Reports were given by Mrs. Eustace A. Allen, Archives Chairman; Mrs. Ralph Chaney, Auditing Committee Chairman, and Mrs. Wallace Bazemore, Courtesy Committee Chairman.

The President appointed the following committee to approve the minutes of the second session: Mrs. Lee Howard, Mrs. G. H. Johnson, Sr., and Mrs. W. R. Dancy.

Mrs. James N. Brawner, Chairman Resolutions Committee, reported the following resolutions, which were adopted by the Auxiliary:

"Whereas, the balance on hand of the Student Loan Fund amounts to the sum of Two Thousand Two Hundred Twenty-Three Dollars and Sixty-one cents (\$2,223.61), plus one (1) One Thousand Dollar (\$1,000.00) Series "F" War Bond; and

Whereas, the U. S. Government has taken over the medical schools and the medical education of students for the present;

Whereas, there is still a need for aid to 4-F students deferred for slight physical disabilities; and

Whereas, the fund will be needed after the close of the war to fill the places made vacant by losses in the armed forces, by armies of occupation in foreign countries and the like;

Therefore, Be it Resolved, that the Woman's Auxiliary to the Medical Association of Georgia purchase one more One Thousand Dollar (\$1,000.00) War Bond—that this purchase be made after July 1, 1944, in order that our fund may draw its next interest installment.

Be It Resolved Further, that the balance of the fund, in addition to gifts and donations made during the coming year, be held intact for any loans that the Student Loan Fund Committee may be called upon to make during the ensuing year;

Be It Further Resolved, that the said bonds be kept by the Treasurer as a part of the Student Loan Fund.

The additional bond to be purchased by the Treasurer."

Mrs. Brawner moved the adoption of this resolution; seconded by Mrs. Eustace Allen, and motion carried.

"Whereas, the Woman's Auxiliary to the Medi-

cal Association of Georgia has not, in the past, published the records or proceedings of its State Conventions; and

Whereas, there is a vital need among the County Auxiliaries for more definite information as to organization and activities; and

Whereas, a printed or mimeographed record of State Conventions would provide definite and accurate information;

Therefore Be It Resolved, that the proceedings, or minutes, of State Conventions be published and distributed to State, District and County leaders—the exact number to be left to a committee for the purpose of publishing such proceedings."

Mrs. Brawner moved the adoption of this resolution: seconded by Mrs. J. Lon King, and motion carried.

The President appointed the following committee to work out plans for publishing minutes:

Mrs. J. N. Brawner
Mrs. J. Harry Rogers
Mrs. Eustace Allen
Mrs. Olin S. Cofer
Mrs. Charles Usher

Mrs. Harry Kandel gave a final report of registration as follows:

Total registration	106
Past Presidents	8
State Officers	7
State Chairmen	11
District Managers	2
County Presidents	4
Delegates	19
Members	101
Guests	5

The nominating committee with Mrs. H. G. Banister, chairman, reported as follows:

President—Mrs. W. T. Randolph, Winder

President-Elect—Mrs. Lucius N. Todd, Augusta

1st Vice-President—Mrs. Edgar Greene, Atlanta

2nd Vice-President—Mrs. L. W. Williams, Savannah

3rd Vice-President—Mrs. Leonard Massengale, Lumpkin

Recording Secretary—Mrs. Charles Usher, Savannah

Treasurer—Mrs. Ralph Fowler, Marietta

Historian—Mrs. W. W. Puett, Norcross

There being no nomination from the floor the Secretary was instructed to cast the ballot. The President declared the ticket of officers as presented by the nominating committee elected to serve for 1944-1945.

Mrs. Lee Howard installed the new officers and Mrs. Joseph Yampolsky presented the Past President's Pin to Mrs. Olin S. Cofer.

Mrs. W. T. Randolph, the newly elected President, announced Mrs. Alex B. Russell, Corresponding Secretary and Mrs. Lee Howard, Parliamentarian.

The Post-Convention Board Meeting was announced by Mrs. Randolph to be held at 3 P.M. in Breakfast Room, Hotel DeSoto, May 11, 1944.

An invitation was extended the Auxiliary to attend the launching of the Juliette Lowe Steamship at the Southeastern Ship Yards, on May 12, 1944, at 12 noon.

There being no further business the President declared the 20th Annual Convention of the Woman's Auxiliary to the Medical Association of Georgia adjourned at 12:45 P.M.

MRS. OLIN S. COFER,

President

MRS. CHARLES USHER,

Recording Secretary.

POST-CONVENTION BOARD MEETING

May 11, 1944

The Executive Board Meeting of the Woman's Auxiliary to the Medical Association of Georgia met Thursday, May 11th, 1944, at 3 P.M. in the Breakfast Room of the DeSoto Hotel, with the President, Mrs. W. T. Randolph, presiding. Prayer was offered by Mrs. Randolph.

The President appointed Mrs. J. N. Brawner and Mrs. Olin S. Cofer delegates to the American Medical Association Auxiliary. Mrs. Brawner was asked to bring the report. Delegates appointed to the Southern Medical Auxiliary were Mrs. A. H. Bunce, Mrs. Olin S. Cofer and Mrs. Ed Greene and Mrs. Charles Daniel as alternates.

Mrs. Joseph Yampolsky moved that the President appoint a chairman to buy and present the Past President's Pin, seconded by Mrs. Ralph Chaney and motion carried. Mrs. Joseph Yampolsky was asked to present and buy the Past President's Pin.

The President announced the following chairmen to serve for 1944-1945:

Public Relations—Mrs. Harry Rogers

Visual Education—Mrs. W. D. Hall

Legislation—Mrs. F. M. Martin

Press and Publicity—Mrs. Chas. H. Daniel

Doctors' Day—Mrs. C. B. Almand

Research and Romance of Medicine—Mrs. D. H. Garrison

Jane Todd Crawford Memorial—Mrs. W. M. Flanagin

Revisions—Mrs. Ralph Chaney

Archives—Mrs. Eustace Allen

White Exhibits and Scrapbook—Mrs. J. Lon King

Mrs. J. N. Brawner Trophy—Mrs. Olin S. Cofer

Bulletin—Mrs. Stacy Howell

War Participation—Mrs. R. V. Martin

Corresponding Secretary—Mrs. Alex B. Russell

Mrs. H. G. Banister was nominated by Mrs. Eustace Allen for Student Loan Fund Chairman; seconded by Mrs. Dancy and motion carried.

(Continued on page 293)

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingleddorf, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone WALnut 8911; residence, VERNon 1230.

Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone WALnut 8911; residence, JACKson 7979.

NURSING SERVICE AND NURSING EDUCATION IN WARTIME

PHOEBE M. KANDEL, R.N., M.A.
Professor of Nursing Education
University of Georgia
Athens

Because of the significant response to the introductory Nursing Education course in the fall of 1941, the Georgia League of Nursing Education appointed a committee in 1942 to make a study of the interests of the nurses, and, early in 1943, expanded the committee to arrange for a study of the facilities for an academic nursing education program in Georgia.

In view of the establishment of the United States Cadet Nurse Corps in the United States Public Health Service, through the Bolton act, passed by Congress in June, 1943, and in view of the shortage of adequately prepared teachers in the sciences and social sciences for the schools of nursing, a centralized teaching program was established in the University of Georgia. The colleges within the University System of Georgia, and the accredited colleges where hospital schools of nursing are located, were invited to take part in giving instruction in the centralized teaching plan.

The Department of Nursing Education was established in the College of Education with the opening of the fall quarter, 1943-1944. The three hospital schools of nursing which began participating in the centralized teaching plan were the Georgia Baptist, Crawford W. Long and Piedmont in Atlanta. The University of Georgia bought teaching facilities at the University System of Georgia Junior College in Atlanta. The chancellor of the University System of Georgia and the director of the Junior College provided the necessary class room changes for teaching microbiology, anatomy and physiology, at an investment of \$6,300.

The faculty for the United States Pre-Cadet Nurse Corps instruction for the first three quarters, or pre-cadet period, consisted of a professor of nursing, assistant professor of nursing,

two nurse science instructors, two laboratory technicians, two home economics teachers, hospital dietitians, nursing arts teachers, and junior college faculty in sociology, chemistry, anatomy and physiology.

The coordinator, who is the head of the nursing education program, met requested counselings by the directors of nursing in Augusta, Macon, Milledgeville and Savannah.

Four programs in nursing developed within the first year; namely, 1, The Centralized Teaching Program for basic instruction of the Cadet Nurse Corps students in Atlanta; a total of 202 students having been admitted over the fall, winter and spring quarters. Each class carried two quarters' work at the Junior College; 2, The basic program, for one quarter, was established for the Macon Hospital School of Nursing Cadet Corps students at the University in Athens, with the summer quarter, 1944; 3, Advanced instruction in ward management and clinical teaching was carried by the University nursing faculty to the University Hospital in Augusta and to the City Hospital in Columbus. A special instructor was appointed to conduct the course in ward management and clinical teaching to a large group of graduate nurses in Atlanta. All of the schools of nursing were represented in the class; 4, A summer session program was offered for graduate nurses on the University campus. A total of 402 nurses were registered in the University of Georgia and the Junior College, of whom 130 were graduate nurses. The United States Public Health Service (Bolton Act) gave scholarship assistance to the pre-cadet students through the cooperating hospital schools of nursing in the centralized teaching program; and to the graduate nurses attending the summer session at the University.

On July 7, the president of the University of Georgia, Dr. Harmon W. Caldwell, recommended to the chancellor of the University System of Georgia that the nursing education program be made permanent by the organization of a University School of Nursing. The Board of Regents approved the recommendation. The nurs-

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

WHAT GEORGIA IS DOING ABOUT TYPHUS FEVER

The physicians of Georgia are rendering a great service in the control of typhus fever by reporting their cases to the State Department of Public Health. Without these reports it is obvious that we would be at a total loss as to the existence and geographical distribution of the disease. The number and geographical distribution of typhus fever cases as reported by the physicians of Georgia indicates that the control of typhus fever of the murine, or rat-borne type, is unquestionably a tremendous problem requiring a long range program in which all available resources must be utilized. This problem may be exemplified by the fact that since 1937, 7,184 cases of the disease were reported in Georgia, about 90 per cent of which were reported from the Southern portion of the State, involving 85 counties and approximately 37,000 square miles in area. Although the prevalence of the disease is confined principally to our cities, towns and villages, sporadic cases do occur in sparsely settled areas, which indicates that the rat population in rural areas is infected to a large extent with typhus fever as well as the rat population in cities, towns and villages. In view of this fact, it is extremely unlikely that all of the typhus infected rats could be exterminated from such a large area in our State. From previous experiences, county and city-wide rat extermination campaigns have resulted only in a temporary reduction in the reported cases.

The primary function of the Typhus Fever Control Service is to determine the typhus foci of infection and promote and coordinate the efforts of local governmental agencies, civic organizations and individuals toward the establishment of control programs.

The activities of the Typhus Fever Control Service consist of analyzing morbidity and mortality reports from physicians and preparing spot maps showing the geographical distribution of the disease. From the spot maps and with the aid of the medical staff of the Division of Preventable Diseases, necessary epidemiologic investigations are made and typhus focal points established. Supported by these investigations and sanitary engineering investigations, reports are prepared and submitted to the local authorities. Reports outline in detail the typhus problem, control measures recommended and estimated cost of the program. Local programs are established under the direct supervision of the local health departments with the State Typhus Fever Control Service rendering general advisory assistance. In counties without health departments, the Typhus Fever Control Service furnishes direct supervision over the programs.

All local personnel employed to carry out typhus control measures are trained by the professional staff of the Typhus Fever Control Service.

The costs of local typhus control programs are defrayed by the individual property owners or, as many municipalities have done in the past, the City Council appropriates the necessary funds in order that the program may be fully completed in the shortest possible time. In municipalities where the individual property owner is responsible for the cost of rat control measures, ordinances are enacted requiring full compliance with the program.

In the absence of any other means of typhus control, such as might be accomplished through immunization, the program in Georgia is designed to employ all practical means of rat control. As to the rat control measures utilized, the program may be termed a three point program:

1. Rat extermination by means of poison bait and traps is used as a temporary measure of control, usually applied in areas where outbreaks of the disease occur in order to render immediate control. This temporary control measure is also used in conjunction with a permanent measure of control such as "vent-stoppage" as originated by the Typhus Fever Control Service.
2. "Vent-Stoppage," as the name implies, consists of closing or protecting openings or vents in exterior walls of buildings to prevent the ingress of rats. "Vent-stoppage" is designed to break the close association between man and rat, which is necessary for the transmission of the disease. It is applied principally to business establishments for the reason that epidemiologic investigations reveal that the disease is contracted more often by persons working or associated with such establishments.
3. The third and final stage of the typhus control program is the sanitary collection and disposal of refuse. This phase of the program is as important as any of the other control measures employed as it governs to a large extent the size of the rat population in any community through the regulation of the rats' food supply. For example, garbage left over night in uncovered garbage containers or garbage thrown on the ground in alleys affords the rat population ample food supply. Open garbage dumps, as existing in most communities in Georgia, serve as the principal rat reservoir of the community. Insanitary conditions as exist in open dumps are most favorable for rat propagation. If every community in Georgia would exercise rigid control over the

proper sanitary collection and disposal of refuse, this alone would reduce the existing rat population to such an extent that there should be a decided reduction in the number of typhus cases occurring each year.

All three control measures as outlined above are closely related and must be applied together in order to obtain the maximum effectiveness.

During the five year period 1939 through 1943, the Typhus Fever Control Service rendered services in 94 counties. In rendering these services, 1,894 field visits were made, and 165 meetings, consisting of city councils, civic organizations and other public gatherings were addressed. A total of 25,000 pieces of literature was distributed, ninety-one reports involving investigations and recommendations for typhus control programs were submitted to local authorities. Control measures have been applied in 85 cities and towns. Permanent control programs on a par with other municipal services have been established under the supervision of the local health departments in Atlanta, Savannah, Columbus, Macon and Camilla. Each of these cities maintains a Typhus Fever Control Service, consisting of full-time personnel, equipment and supplies to carry on a continuous rat control program. In addition, many other cities and towns in Georgia are at the present time establishing permanent typhus control programs.

In certain war areas of the State a definite increase in the number of reported typhus fever cases over previous years has been recorded. This increase has no doubt been influenced to some extent by the mass migration of people from non-war areas to war areas. This shifting of the population has resulted in more people becoming exposed to the disease. Because of the prevalence of the disease in these areas and the importance to the war effort, the activities of the Typhus Fever Control Service are confined principally to war areas of the State.

ROY J. BOSTON, *Engineer*
Typhus Fever Control Service
Georgia Department of Public Health.

NURSES' ASSOCIATION

(Continued from page 291)

ing education program will be expanded to embody a five-year curriculum to meet the requirements of a Bachelor of Science in Nursing. This program is designed for all students to have their first six quarters either at the University of Georgia or other university or college. It is suggested that applicants who have had their first year of college work elsewhere transfer to the University the second year because of subject matter offered especially for nursing in the third quarter. The students will then have their hospital nursing experience, returning to the

University of Georgia for the last three quarters. During this instruction the nurses will choose either teaching of the nursing arts or clinical nursing instruction, or public health nursing. The nurses on graduation will be able to fill first level nursing positions. There will be programs for the graduate registered nurses for the preparation of nursing arts and clinical instructors, also public health nurses.

WOMAN'S AUXILIARY

(Continued from page 290)

The President appointed the following committee for the Revision of the Brawner Trophy:

Mrs. Olin S. Cofer, chairman; Mrs. J. N. Brawner, and Mrs. W. A. Selman.

Mrs. J. Lon King, chairman; Mrs. S. T. R. Revell and Mrs. Cleveland Thompson were elected to serve on the Achievement Award Committee.

Mrs. Lee Howard moved that the Visual Education Chairman consult with whomever is in charge of the Health Film Library to make the securing of films easier; seconded by Mrs. W. M. Flanagan and motion carried.

Mrs. Ralph Chaney moved that the Auxiliary dispense with Address of Welcome and Response on the second day of convention. Motion carried.

The meeting adjourned at 3:50 P.M.

ROSE S. USHER, *Secretary*.

A.M.A. LAUNCHES BROAD PROGRAM TO IMPROVE INDUSTRIAL HEALTH

The broad program now under may to improve and safeguard the health of the nation's industrial workers has been outlined by Dr. W. W. Bauer, director of the Bureau of Health Education for the American Medical Association.

In an address delivered (July 25) on the coast-to-coast radio program, Dr. Bauer emphasized that "when battle lines extend from the far corners of the earth into the remotest American hamlet where industrial production takes place, the health of the industrial worker takes equal rank with that of the fighting man."

"Riveter, press operator, machinist, inspector, and draftsman, not to mention executive and stenographer," he said, "are as vital to victory as machine gunner, bazooka team, ack-ack gunner, or pilot."

Accordingly, Dr. Bauer explained, the A.M.A. through its Council on Industrial Health, in addition to guiding the organization of industrial health committees in

state and county medical societies throughout the country, has devoted special issues of the Association's publication to the subject.

In furtherance of its purpose of improving the health of the production front, the council also has been instrumental in introducing its study in the curriculum of medical schools and post-graduate courses for physicians, he said.

The small factory offers one of the greatest medical and health problems in industry, Dr. Bauer said, owing to its inability because of size to provide unaided the necessary safeguards and prompt treatment for on-the-job injuries. To assist in relieving this situation a comprehensive set of standing orders for industrial nurses working without the immediate supervision of a doctor has been developed by the council in accord with accepted medical practices.

Of equal value as a safety measure, Dr. Bauer pointed out, has been the publication in pamphlet form of a procedure for industrial physical examinations classifying workers into the following groups: those fit for all work; those fit for work under periodic medical supervision with limited physical exertion, in non-hazardous work, or with special consideration for orthopedic defects, impaired vision or hearing, or psychologic handicaps; and those unfit for work at time of examination.

THE PHYSICIAN'S BOOKSHELF

Handbook of Nutrition, a symposium prepared under the auspices of the Council on Foods and Nutrition of the American Medical Association, 586 pages fully indexed, priced at \$2.50 and obtainable through the American Medical Association, 535 North Dearborn St., Chicago, is an admirable effort to present to the American medical profession and others as well, present-day knowledge of the all important subject of nutrition. This book is too good to be missed by anyone interested in a better people, and a better world in which to live.

Clinical Lectures on the Gallbladder and Bile Ducts, by Samuel Weiss, M.D., professor of gastroenterology at the New York Polyclinic, New York, N. Y., published by the Year Book Publishers, Inc., 304 South Dearborn St., Chicago, Ill., priced at \$5.50, is an attractive volume of 504 pages devoted to full discussion of problems dealing with the gallbladder and bile ducts. As is well known to all physicians, when considering the diseases affecting the so-called biliary system numerous questions present themselves, not the least being

whether the patient should be treated medically or surgically. This book, then, should prove a valuable addition to any physician's bookshelf.

NEW UPJOHN DISPLAY FEATURES PHARMACY IN THE WAR

Pharmacists are performing herculean tasks in the armed services of our country and in civilian business. To pay tribute to these men, The Upjohn Company is featuring "Pharmacy in the War" in their new institutional window display.

The large center piece of the display carries a number of official Army and Navy photographs showing pharmacists on duty in various parts of the world, including such areas as Italy, Australia, and Bougainville. Prominence is given to the statement: "From foxholes to base hospitals . . . from jungles to Arctic wastes . . . pharmacists are serving the armed forces."

One large side card carries photographs showing research, production, and packaging processes in the manufacture of pharmaceuticals. The other side card shows some of the new pharmaceutical products that are performing such miracles on the battlefield. One of the cards bears this startling assertion:

Average consumption of pharmaceuticals of men overseas is two pounds per man per month.

Pharmacists are serving in every branch of our armed forces. They are contributing much to the war effort on the home front by carrying on under discouraging handicaps of manpower shortages. They are helping the physicians carry their heavy loads under wartime conditions.

The people in every neighborhood should know these facts.

NEWS ITEMS

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, August 3. The scientific program consisted of a symposium on "Cardiovascular-Renal Diseases." Titles of the various papers in the symposium were: "Cardiovascular-Renal Disease and Pregnancy" by Dr. J. R. McCord; "Renal Hypertension," Dr. A. J. Merrill; "Surgical Treatment of Hypertension," Capt. Geo. S. Baker.

Dr. Ben H. Clifton, Atlanta, president of the Fulton County Medical Society, wrote the leading article on "Public Relations" for The Bulletin of the Fulton County Medical Society published August 3. Titles of other articles published were: "Emergency Maternity and Infant Care Program in Georgia"; "The A. M. A. in Chicago"; "Emory's Forty-Third Broadcast"; "President of the American Medical Association Visits Newton D. Baker General Hospital," Martinsburg, W. Va.; "News Items" and "In Memoriam."

Dr. H. L. Earl, Sparta, attended the Southern Seminar held recently at Saluda. He was unanimously re-elected president for a second year.

A meeting of the medical societies of Burke, Jenkins and Screven Counties was held on July 14. Dr. J. M. Byne, Jr., Waynesboro, reported a rare case of "Poly-

neuritis"; Dr. W. D. Lundquist, Waynesboro, reported cases of "Acute Nephritis Following Impetigo Infection," also cases of "Bone Abscess Resulting from Skin Infection." Others present were: Doctors W. C. McCarver, Jr., Dr. W. C. McCarver, Sr., Dr. W. D. Lundquist, Dr. H. F. Bent, Dr. W. R. Lowe, Dr. Kathrine Rawls, and Dr. Cleveland Thompson. Millen, president of the Medical Association of Georgia.

Dr. Thomas Parran, surgeon-general, U. S. Public Health Service, was in Savannah on August 17 inspecting Malaria Control Laboratories.

Dr. Clifton G. Kemper announces the new location of offices at 416 Doctors Building, 478 Peachtree Street, N. E., Atlanta. Practice will be limited to medical and surgical cases.

Dr. Glenn J. Bridges announces the opening of offices in Suite 811 Medical Arts Building, Atlanta. His practice will be limited to urology.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, September 7. Comdr. A. Worth Hobby read a paper entitled "Virus and Pneumococcal Pneumonias"; Dr. Wm. F. Lake, "X-Ray Findings in the Pneumonias"; Dr. Joseph C. Massee, "Medical Management of the Pneumonias"; Dr. T. C. Davison, "Surgical Treatment of Empyema"; Dr. Paul Beeson, "The Medical Treatment of Empyema"; Dr. Edwin R. Watson, Georgia Department of Public Health, "Emergency Maternity and Infant Care Program in Georgia."

Dr. Alton Oschner, professor of surgery and chief of the Department of Surgery, Tulane University of Louisiana School of Medicine, New Orleans, will speak before a meeting of the Fulton County Medical Society on October 5. Dr. Oschner will speak at the anniversary meeting of the Sheffield Cancer Clinic at the Georgia Baptist Hospital, Atlanta, October 6.

Dr. Ben H. Clifton, Atlanta, president of the Fulton County Medical Society, wrote the President's Message—"Labor Day" which was published in the September 7 issue of the Bulletin of the Fulton County Medical Society. Other articles published in the same issue of The Bulletin are: "The Physiology of Old Age" by Dr. George Bachmann; "Geriatrics from the Standpoint of Internal Medicine," Dr. John B. Fitts; "Surgery in the Aged," Dr. J. Gaston Gay; "Army Service Forces—Lawson General Hospital", Capt. M. M. Kissane, M.C.; "War Neuroses (Abstract)", Major A. R. Anderson; "Modern Concepts of Coronary Disease", Major R. Bruce Logue, M.C.; "Hypertension Associated with Renal Disease—Abstract", Dr. Arthur J. Merrill; "Surgical Treatment of Hypertension", Major George S. Baker, M.C.; "Heart Disease and Pregnancy," Dr. J. R. McCord.

The Fulton County Medical Society will feature "Clinic Day" on November 2. Clinics will be held at Grady Hospital, Atlanta, from 9:00 A.M. to 5:00 P.M. Dinner will be served at the Academy of Medicine at 6:30. A guest speaker will address the Society and visitors at 7:30. Additional information will be published in the October issue of THE JOURNAL. A hearty invitation awaits you to be present at the clinics, enjoy dinner with us, and hear our guest speaker.

OBITUARY

Dr. Thomas Rufus Aycock, Monroe; member; University of Georgia School of Medicine, Augusta, 1909; aged 62; died August 5, 1944, at St. Joseph's Infirmary, Atlanta. He was born and reared in Monroe. He took post-graduate study in New Orleans and New York City before he began practice. Dr. Aycock was a successful practitioner, had many friends and devoted his entire professional career to the service of the people of Walton County. He was one of the State's best citizens. Dr. Aycock served as captain in the U. S. Army during World War I. Surviving him are his widow, one daughter, Mrs. W. E. Hudson, Athens; one son, Joe Kemp Aycock, Atlanta. Rev. James Segars officiated at the funeral services conducted at the First Methodist Church. Burial was in Rest Haven.

Dr. William Thomas Meeks, Blairsville; Emory University School of Medicine, Emory University, 1915; aged 70; died July 10, 1944, at his residence after an extended illness. He was born and reared at Cleveland. He had been a member of the Baptist Church for 60 years. He was favorably known throughout Union and adjoining counties. Surviving him are his widow, four sons, W. T. Meeks, Jr., U. S. Army Air Corps; Jack L. Meeks, U. S. Navy; Charles E. Meeks, Beaver, Pa.; John L. Meeks, Charleston, S. C. Rev. H. G. Jarrard officiated at the funeral services conducted at the Blairsville Baptist Church. Burial was in the Blairsville Cemetery.

Dr. Alfred Kennon Duckett, Blue Ridge; member; Emory University School of Medicine, Emory University, 1935; aged 33; died August 18, 1944, after a long illness. He was a native of Clayton. Dr. Duckett served as an intern at the Spartanburg General Hospital, Spartanburg, S. C. He established the Duckett Hospital at Blue Ridge and operated it until disabled. He had an extensive practice in Blue Ridge and surrounding community. Dr. Duckett had many friends and was a good citizen. Surviving him are his widow, two daughters, Misses Mae Ola and Tommie Sue Duckett, all of Blue Ridge. Funeral services were conducted from the Blue Ridge Methodist Church. Burial was in the Cornelia Cemetery.

INFANTILE PARALYSIS PROGRESS

Announcing that the American people had contributed an all-time record of \$10,973,491 to the 1944 Fund-Raising Appeal of The National Foundation for Infantile Paralysis, Basil O'Connor, Foundation president, declared recently that these donations will permit an expansion of the war against the children's enemy on the home front.

With epidemics or serious outbreaks now taking their toll in twelve of the states of the nation, Mr. O'Connor pointed out that the number of cases reported is already higher than for the comparable period last year when the country suffered its third worst epidemic.

Mr. O'Connor said the National Foundation would now be able to add more epidemic fighters and additional equipment for emergency aid and, at the same time, continue its relentless fight to learn how to prevent and cure the disease.

"Funds from the 1944 March of Dimes," he continued, "will permit the National Foundation not only to expand its aid to those who are stricken but also to open up new fronts of research which some day will pierce the defense of this disease and permit us to prevent it."

"Already 1,460,000 dimes are at work in the state of North Carolina where representatives of the National Foundation work day and night with state and local authorities to provide emergency aid, professional workers and equipment to meet the epidemic situation."

Dimes and dollars contributed by Americans also are at work in Kentucky, New York, Louisiana, Pennsylvania, Virginia, Tennessee, Ohio, Michigan, Maryland, Mississippi and Indiana where there are serious or threatening outbreaks, he added.

"We have no way of knowing how far the danger will spread, nor how many homes will suffer tragedy before this year's epidemic subsides," warned Mr. O'Connor, adding "but we do know that we have never before been so well equipped to meet the ravages of infantile paralysis as we are this year."

This year's donations almost doubled the former record of \$5,527,590 set in 1943, Mr. O'Connor said, and the total comprised millions of small donations indicating that "almost every person in this country has had some part in creating the means of carrying on this mighty crusade."

"From Army and Navy bases half way around the world came donations from the brave fighters in our armed services," said Mr. O'Connor, which he considers "a mandate to us here at home not to neglect the fight against this home-

front enemy while they are battling our foes abroad."

through the celebrations of the President's birthday is retained by the 3,000 county chapters for aid to those stricken with poliomyelitis; the other half goes to the National Foundation for its program of research, epidemic aid and education.

Mr. O'Connor praised the cooperation of the film industry, movie patrons, the sports world, the press, radio, war workers, school children, labor, industry and "Mr. and Mrs. America in every conceivable station of life who aided in this vital movement."

One-half of the funds raised each January

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PLACENTA PRAEVIA

Report of 170 Cases

JOHN T. PERSALL, M.D.

RICHARD TORPIN, M.D.

Augusta

This is a study of a series of 170 cases of placenta praevia observed in the University Hospital, Augusta, over a period of the last twenty years, all treated by many physicians and members of the staff.

Probably the most valuable contribution of this paper is the racial frequency of placenta praevia inasmuch as the proportionate Negro and white population is fairly well established and quite uniform in this vicinity, and practically all cases come to this hospital. In this series there were 113 white and 57 Negroes; the racial proportion here is 58 per cent white and 42 per cent Negro, consequently the incidence of placenta praevia established in this study is more common in the white race than in the colored race in about a 64 to 36 ratio. It is definitely shown to be more common in multiparas than in primiparas, although the relative incidence of multiparous to primiparous deliveries in this hospital has not been established. It seems to be relatively rare in primiparous Negroes.

Frequency: Two white to one colored.

	White	Colored	Combined	(per cent)
Primipara	32 (32%)	7 (12.9%)	39	(25.3%)
Multipara	68 (68%)	47 (87.1%)	115	(74.6%)
Not reported..	13	3	16	
	113	57	170	

Presentation:

Cephalic	84	42	126	(74.26%)
Breech	28	14	42	(24.56%)
Transverse	1	1	2	
	113	57	170	

Transfused:

Bef. delivery..	6	6	12
Dur. delivery..	1	0	1
Aft. delivery..	17	6	23
Not trans- fused	89	45	134
	113	57	170

Mortality:

Recovered	106	49	155
Died	7	8	15
	113	57	170

The results of treatment in this series correspond with that obtained in similar series treated elsewhere. Of the 15 cases terminating in maternal death, 4 entered the hospital in extremis, 9 died of hemorrhage and shock, 1 of acute yellow atrophy and hemorrhage, 1 of bronchopneumonia, 1 of spinal meningitis, 1 of puerperal sepsis and pneumonia, 1 of congestive heart failure and pneumonia, and 1 of generalized peritonitis.

Only 21 per cent of all cases were transfused, of which one received the total amount of 7,100 cc. of whole blood before dying.

The lesson to be learned from this mortality record is that every pregnant woman should be within the range of a blood bank with at least four pints of blood of each type available at all times. Furthermore, all women should be taught the danger of third trimester hemorrhage.

Discussion

Placenta praevia, first clearly described by Paul Portal (1664), is a condition of the third trimester of pregnancy which places the mother and fetus in the most

From the Department of Obstetrics and Gynecology, University of Georgia School of Medicine, Augusta.

Read before the Medical Association of Georgia, Savannah, May 10, 1944.

extreme danger from maternal exsanguination, all the more so because, as a rule, it is unaccompanied by pain. Any vaginal bleeding late in pregnancy, or in the first stage of labor, must present to the mind of the attendant the probability of placenta praevia and should then set in motion a routine procedure which must be followed to the letter if the mortality rate is to be kept low. A study of most of the fatalities reveals that neglect of a few simple procedures on the part of either the patient or the attendant led to the disastrous outcome. Primarily the danger lies in continued loss of maternal blood from open sinuses in the lower uterine segment from which the placenta has partially separated. Secondary dangers arise from: (a) trauma to the cervix and lower uterine segment from attempts to deliver the fetus causing additional hemorrhage, or (b) from subsequent infection following these attempts at operative delivery or attempts to stop the hemorrhage.

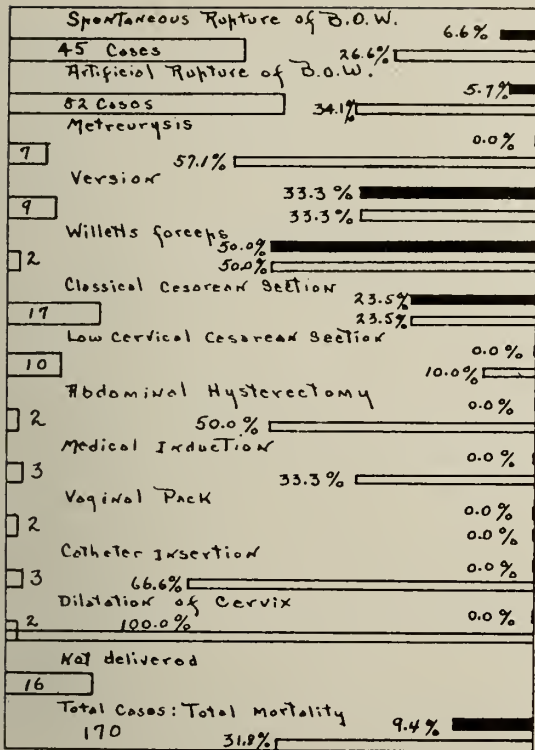
Placenta praevia occurs once in one or two hundred normal deliveries — 0.5 to 1 per cent. Statistics vary considerably in this respect. Placenta praevia seldom occurs twice in the same patient. It is more common in white than Negro women, and many authors show that the condition is much more common in multiparas than in primiparas.

The placenta in this condition develops quite normally in the fundus anterior or posterior wall, but low over the lower uterine segment and may completely grow over the internal os from the front or from behind. This type, then, is known as total (complete, central) placenta praevia. It may be situated low but covering the cervical canal partially and then is known as partial (marginal). Or it may be located over the lower uterine segment but not at all over the internal os and is designated lateral placenta praevia (low implantation). Ordinarily the placenta is discoid but it may be bilobate, having implanted in a well-formed crease in one or the other side of the uterine cavity, but in the lower uterine segment. In such a case the two lobes of the placenta grow one anteriorly and one posteriorly, so that they encircle the internal

os. Some of these may have been mistaken for the total type.

Another item of the condition not well appreciated is that during the latter months of pregnancy when the lower uterine segment is being taken up, there is a constant gradual separation of the margin at or over the internal os and there is a resultant formation of an infarct or atrophy of the portion from which the villi are disturbed. This may be so gradual that there is no hemorrhage, or it may be accompanied by a slight bloody discharge or even by repeated sudden appreciable hemorrhages of from a few cubic centimeters to a cupful or more. It is possible that a mild infection of this exposed necrotic tissue becomes the focus for subsequent more generalized infection to which the patients have a high degree of susceptibility. In many instances of abortion, miscarriage and premature labor of unknown cause, the etiologic factor of the onset of labor may be the irritation of the uterus produced by this gradual separation of the placenta in an unsuspected placenta praevia. It is common knowledge that most placenta praevias terminate pregnancy early and this prematurity is one of the unavoidable causes of the high fetal mortality. Greenhill, in a rather exhaustive statistical study, has shown that the incidence (2.75 per cent) of fetal malformations with placenta praevia is approximately triple that of pregnancy with normal placental implantation (0.94 per cent). Clifford studied stillborn fetuses associated with placenta praevia and found a condition allied to surgical shock. These stillborns had exceedingly heavy internal organs, lungs, kidneys, etc., showing an accumulation of fluid in these organs.

In the literature there is prevalent the idea that there are pathologic changes in the cervix and lower uterine segment. From a study of several cases at autopsy and of many cervixes in patients who lived, we are of the opinion that other than development of large sinuses here there is no special tendency for the uterus not to function in labor and the puerperium quite as well as normally, and there is no additional tendency to spontaneous tearing of the cervix



Graph showing the cases, method of delivery, and mortality both maternal and fetal in per cent.

in labor. Because of the placenta blocking the lower uterine segment and the entrance to the pelvic canal, there is an increased tendency to the malpresentation of the fetus so that it may present, at worst, transversely. Furthermore, since the implantation of the cord more likely is low in placenta praevia, the incidence of prolapse may be increased.

Painless vaginal hemorrhage in the third trimester of pregnancy is suspicious of placenta praevia, but the diagnosis depends upon palpating of the placenta above the cervical canal by sterile vaginal examination made under conditions that permit immediate proper treatment of all possible conditions. Wallace has shown that painless vaginal hemorrhage may be present in premature separation as well as in placenta praevia and that mistakes are made when all vaginal bleeding cases are subjected to cesarean section without further diagnosis. Forty-nine per cent of his cases of premature separation had no pain, one patient dying without development of pain. Differentiation must be made in all cases of vaginal bleeding or spotting in late pregnancy. These are: (1) premature separation of the

normally implanted placenta, (2) granulating erosion of the cervix, (3) cervical polyps, (4) carcinoma of the cervix, (5) granuloma inguinale of the cervix (rare but occasionally seen in Negro women).

If the placenta lies low on the anterior wall, x-ray diagnosis by the method of Ude et al is applicable. In this a roentgen film is taken of the urinary bladder half filled with radio-opaque fluid and of the fetal presenting part so that a space, if any, between the two represents the placental thickness. As shown by Carvalho, this cystographic method is of no value when the placenta is low lying on the posterior wall and half or more of all placentas lie upon the posterior wall. This method gives such indeterminate information that it is hardly worth the cost, time and trouble.

Of definite value is the lateral soft tissue film of Snow and Powell, and Dippel and Brown. In most instances the placenta is visualized upon either the anterior or posterior wall of the uterus and is identified by a thick shadow within the outlined uterine wall. Sometimes distinct calcium deposits are recorded. In this lateral film the degree of engagement of the presenting part and location in relation to the promontory and symphysis pubis may be determined exactly. With increased experience this becomes a more valuable study. It is especially good in differentiating placenta praevia from premature separation of the normally implanted placenta. In the latter condition the placenta shadow is often doubly thick due to the imprisoned blood clot, especially in concealed hemorrhage, and the fetus is pushed to the opposite wall in the uterine cavity. Cesarean section is of very little value in confirming the exact location of the placenta in the uterus unless the incision happens to be made through the placenta. The reason for this conclusion is that as soon as the fetus is delivered, the uterus contracts upon the separating and folded placenta, dislocating all evidence. There is, however, an excellent method of diagnosing the placental site rather exactly after labor has been completed. This method depends upon obtaining a relatively intact placental sac which has a rent in the membranes no larger than that which permitted the escape

of the fetus at delivery. This sac then may be distended with water while it is suspended in a tank of water. The distended sac assumes the size and shape of the cavity of the pregnant uterus at time of delivery, showing the horn areas and the cervical area. It is then quite evident how low the placenta lies and whether it is discoid or bilobate. A model to scale may be made showing the relative position, shape and size of the placenta and its sac.

The immediate diagnosis, however, depends upon the accurate vaginal findings which should show whether the bleeding is coming from a lesion of the cervix or some other portion of the birth canal, or whether the placenta extends down to the cervix partially or entirely covering the canal. Differentiation between placental tissue and blood clot should be made. Without experience this may not be easy to do and may be a source of error. The main factor to determine is whether the canal is totally covered by placenta or whether the presenting part may be palpated directly through the membranes. This is important for determining subsequent treatment.

Aside from replacing blood lost, the basic management of placenta praevia should be rupture of the membranes and a tight abdominal binder if the membranes are accessible, but cesarean section, preferably cervical section, if the placenta entirely covers the internal os and the fetus is alive. Too much emphasis cannot be placed upon the necessity of having blood available for immediate administration for placenta praevia patients. Certainly within fifty miles of every pregnant woman in America there should be a constantly maintained blood bank of at least four pints of each type. Only by such appreciation of the hemorrhage dangers of late pregnancy can the lives of the female population be insured as is now done for the soldiers on the battle field. This is one of the unsolved obstetric problems of America and it must be and can be solved. The technical problem is simple, to wit: for each normal delivery collect from the relatives or friends enough blood to keep the bank supplied. At the end of ten days separate and discard the cells and use the plasma.

Cesarean Section

Study of the world's literature upon the management of placenta praevia demonstrates that the lowest immediate mortality for not only the mother, but more so for the fetus, is obtained by cesarean section. This holds true for the best administered clinics where teamwork and blood transfusions are available and the patient is not moribund. For the mother the mortality in this mode of therapy should be no more than that of the operation itself which is from 2 to 5 per cent, provided the mother is in good condition at the start of the operation. For the fetus the records show that the general mortality may be halved from 40 to 20 per cent or less. Cesarean section, without doubt, has been used too often — first, in patients without very much evidence of placenta praevia. These could have been delivered vaginally with lower mortality and morbidity, and besides they weigh the evidence in favor of the operation. Second, in premature labors where the fetus withstands the operation less successfully than it does vaginal delivery. Third, in lateral and marginal placenta praevias which, in general, are probably better delivered vaginally. Furthermore, cesarean section, both psychologically and physically handicaps the mother's future child-bearing ability. The operation should be reserved for a live fetus in central placenta praevias which have had accurate diagnosis by sterile vaginal examination. This examination does not prejudice the life of the mother if the examination is done in sterile field and if the operation is done immediately after the examination. Therefore, everything should be planned accordingly prior to any such manipulation, including having blood available. The usual incidence of the central type of placenta praevia is stated in most papers to be 20 per cent. This figure is undoubtedly too high, due probably to incomplete examination. In the series here described there were only 2 of this type. All others were marginal or lateral, and these are better treated by vaginal delivery according to a stated routine which includes blood transfusion, rupture of the membranes combined with a tight abdominal binder (Bartholomew, Arnell and Guer-

riero). As Gauss states, "A spontaneous delivery after rupture of the membranes is to be sought after because it is the best method of treatment for both mother and child." If this fails to control the vaginal bleeding until labor is completed, a large Voorhees bag properly placed will certainly do so. Rucker reported the use of a bag in 90 instances with 100 per cent live mothers and live babies. The bag may be introduced entirely outside of the unruptured fetal sac (extraovulatory), or inside of the ruptured membranes. Kappius reported no change in further blood loss in either case. Both did well in this respect. After expulsion of the bag more bled when the membranes were intact and there was greater stillbirth percentage. The attendant in these instances must see that one or the other pole of the fetus is ready to engage during labor. He also must be certain that the fetal presenting part immediately replaced the bag in pressing against the placenta as soon as the bag leaves the cervix; if not, much unnecessary bleeding can take place into the birth canal before engagement of the fetal part.

Adair is of the opinion that if the fetus is dead, vaginal delivery should take precedence over cesarean section, even if the placenta totally covers the internal os. In these cases it is probably best to bore through the placenta and bring down a leg or use tenacula attached firmly to either the fetal skull or to the pelvic bones. If the presentation is transverse with dead fetus the fetus should be turned by Braxton-Hicks' method. Just enough traction to the presenting fetal part to control bleeding should be used. If there is no feto-pelvic disproportion the ensuing labor will take care of expelling the fetus and sac with safety to the mother. During this time the blood lost may be replenished by transfusion.

The life of the fetus must be considered at all times and it may be helped by fluids, by dextrose and especially by oxygen administered to the mother. Sedation, and morphine especially, are poorly withstood by the fetus in placenta praevia, all the more so when the fetus is premature. After delivery, its head should be kept low and a

bulb syringe used to aspirate mucus and vaginal secretions from its pharynx. Immediate tracheal intubation and insufflation of air or oxygen under 14 mm. of mercury pressure control must be instituted if it tends to become cyanotic. The cord should not be ligated until the fetus has received all of the blood from the placenta possible. In all severe bleeding of the third trimester one must be ready to pack the uterus on a moment's notice to prevent undue additional hemorrhage (Bartholomew).

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MEDICAL DEPARTMENT TRAINS MEDICAL ADMINISTRATIVE CORPS OFFICERS AS BATTALION SURGEON ASSISTANTS

In order to relieve the critical shortage of doctors, the Medical Department of the Army has recently increased its quota for admission to officer candidate schools and has initiated a new program of training graduate administrative officers as battalion surgeon assistants. Between now and April 1945, appointments will be made in the Medical Administrative Corps after seventeen weeks training at Camp Barkeley, Texas, and Carlisle Barracks, Pennsylvania.

From among these graduates, officers with appropriate backgrounds will be selected to receive six weeks additional training at Camp Barkeley for duty assisting battalion surgeons. The special training consists principally of advanced first aid which will qualify these officers to relieve battalion surgeons of details and thus permit the surgeons time for purely medical and surgical work.

CONSERVATIVE SURGERY IN THE TREATMENT OF UTERINE DISPLACEMENT

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Elective surgery increases during eras of prosperity and if the various types of "tacking-up fallen wombs" does not head the list it most assuredly holds a position near the top of non-emergency operations.

With increasing frequency during recent years I have found that young women who came for examination because of menstrual disorders, backache, headache, dysuria, and other complaints attributable to pelvic disorder, have had an operation for displaced uterus. Unfortunately the symptoms persist in some women postoperatively, and not always but all too often the symptoms and complaints are more marked. A retrodisplaced, freely movable uterus, unassociated with any pelvic lesion, seldom causes symptoms sufficient to justify operative treatment.

Almost thirty years ago, Dr. J. Montgomery Baldy stated, "In my opinion nine-tenths of the operations performed on women for retrodisplacements are uncalled for; and further, the possible number of retrodisplacement operations performed in this country is limited only by the number of females in existence."¹

Not only does the performance of a suspension operation fail in some instances to relieve the symptoms complained of, but frequently serious complications develop. Schuman and Beecham reported intestinal obstruction following the Baldy-Webster round ligament operation. A loop of intestine had been caught in the fenestra of the broad ligament in each case.²

A loop of intestine is sometimes trapped with resulting obstruction in the other well-known operations in which the round ligaments or the fundus are attached to the abdominal wall (figure 1).

From this standpoint, the original Alexander extra-peritoneal operation is probably the safest of the accepted technics

which utilize the stronger portion of the ligament. The ideal operation, however, should not only be directed toward restoring the uterus to its anatomically normal location, but should also allow attention to any concomitant pelvis disease.

In some women, continuous attitudinal strain on the sacroiliac joints, the erector spinae and iliopsoas muscles, induces pelvic symptoms that simulate and are generally attributed to retroversion.³

In order to evaluate a problem in which uterine displacement is a definite factor, three conditions must be kept constantly in mind: (1) The normal position of the uterus, and (2) just how it is maintained in the position; and (3) what method should be instituted in an effort to replace a displaced uterus into a normal position where it will remain and function properly.

With the rectum and bladder empty the anterior surface of the fundus lies against the bladder. The uterus is slightly turned on its long axis with the right cornu a little forward. The cervix points down and back and the organ is freely movable. A distended bladder, rectum or intestines might easily alter its position.

The effect of respiration on intra-abdominal pressure causes a change in the position of the uterus.

The altered position of the uterus may be the result of pelvic disease and damaged pelvic floor and the symptoms related by the patient are the result of that condition.

The mobility and support of the uterus is due to the (a) broad ligaments: lateral support for uterus and appendages; (b) utero-sacral ligaments. They hold the cervix in the hollow of the sacrum by coursing upward and outward (woman in upright position). Since the muscle fibres tend to elevate the cervix and maintain the forward position of fundus these ligaments are the true suspensory support of the uterus.

The decussation of muscle bundles coming from the utero-sacral ligaments with the fibres of the cervix and the fibres of the base of the bladder forms an elastic diaphragm around the roof of the vagina,

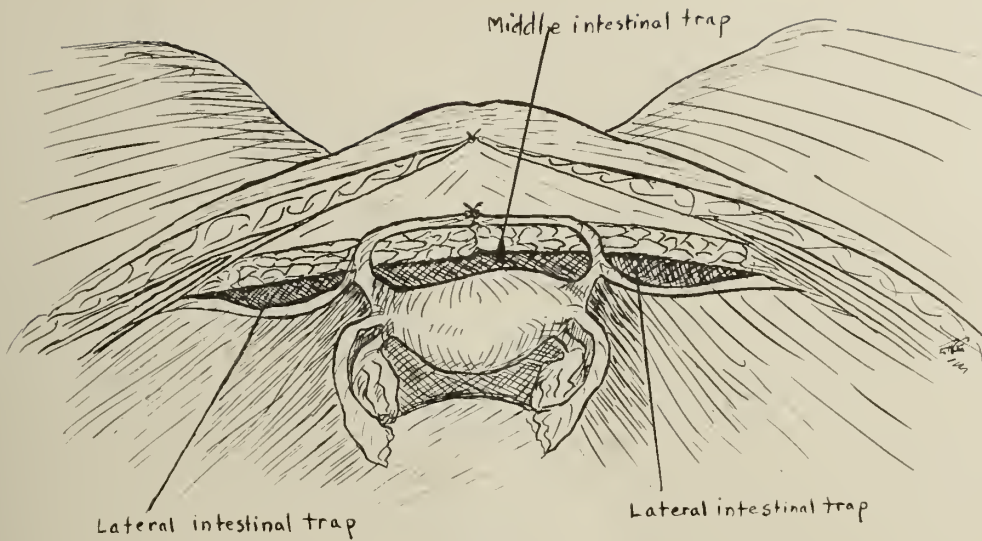


FIGURE 1

Possible danger of intestinal obstruction following antefixation of the uterus (diagrammatic after Martius).

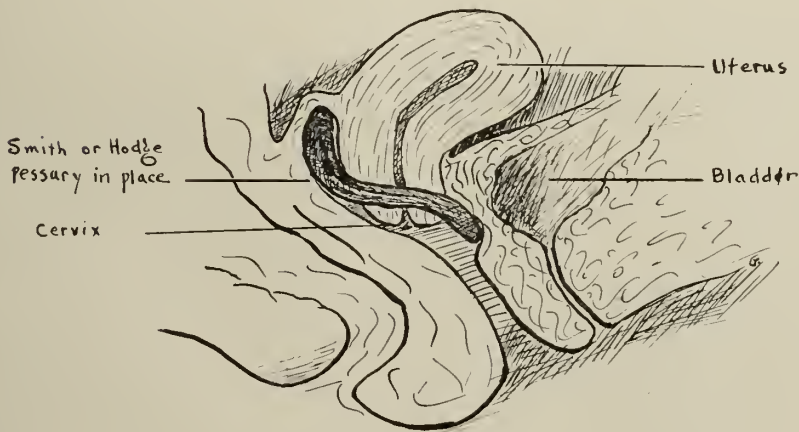


FIGURE 2

When the pessary is in proper position the fundus lies in anteversion and the cervix is in the concave opening (after Curtis).

which not only helps to keep the canal in position but also serves to form a floor for the bladder and uterus to rest upon.

The importance of and proper care of these ligaments in surgery for correction of retrodisplacement is emphasized.

(c) The round ligaments assist in maintaining forward position of the fundus so that intra-abdominal pressure is exerted on the posterior surface of the fundus. The round ligaments, in a measure, control the excursions of and maintain the poise of the fundus. They do not elevate the uterus because their insertions in the fundus are

above their pelvic attachments. This explains the downward-forward pull on the fundus.

(d) The pelvic diaphragm is formed by the levator ani muscles, augmented above and below by fascia (2 layers).

(e) The anterior layers of the triangular ligament afford effective support to the vaginal canal.

From an anatomic point of view, we conclude therefore that the uterus and vagina are maintained in position by being suspended from above and supported from below.

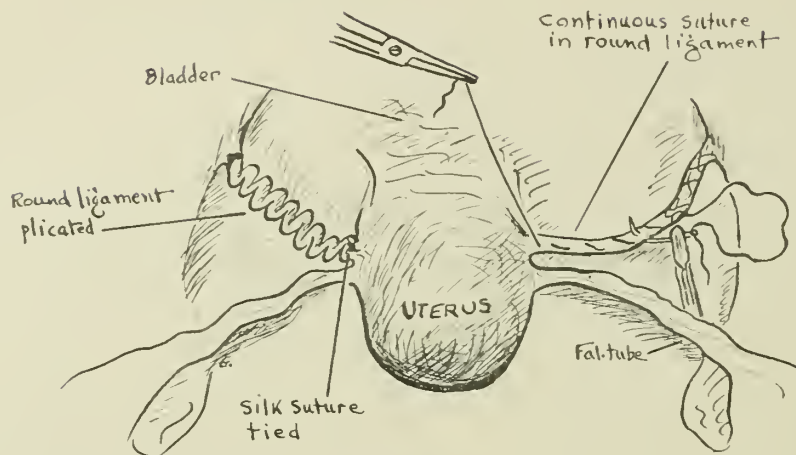


FIGURE 3

Angleworm reefing of plication of the round ligaments. The round ligament is threaded with silk throughout its length as an earthworm is baited on a hook. Without interruption, the ligament is then rethreaded in reverse direction and tied at the starting point. The left ligament above shows the operation completed (after Curtis).

Generally, uterine retrodisplacements are classed as either (a) *congenital* or (b) *acquired*.

(a) *Congenital type*: Displacements of this type seldom produce symptoms and do not require treatment. Pelvic pains, menstrual disturbances, headaches and back-ache often originate from some other source (particularly the endocrines, systemic or structural abnormalities) and should not deceive the surgeon by persuading him to suspend a freely movable normal uterus simply because on examination he finds it in retroversion.

Some investigators consider congenital retroversion as a possible misnomer for the abnormality is so extremely rare."

(b) *Acquired type*: If left alone, or unsuccessfully treated, the flexion may cause alterations in circulation with resultant venous congestion and nutritive changes and serious results to uterus and adnexa may develop. Adnexal disease may eventually result in serious reflex nervous manifestations. If infection and inflammation occur, with a uterus and adnexa in this vicious position, the results are even more severe, and surgery is necessary. Following eradication of the pathologic processes, the uterus, if not removed, should be properly suspended.

Repeated abortions predispose to acquired retrodisplacement. Sterility is sometimes the sole complaint in acquired retrodisplacement.

The development of retroversion post-partum is not unusual. A properly fitted pessary during the period of involution may prevent it.

E. Shute says that pregnancy only occasionally alters uterine position and, when it does, is nearly four times more likely to correct retroversion than to produce it.⁴

The uterus by repeated backward pressure from distended bladder, aided by continued misdirected intra-abdominal pressure, may cause continued backward tilting of fundus until complete retroflexion develops.

A multipara with retroflexion of long standing usually presents the following findings: Enlarged uterus, hypertrophied cervix, prolapsed, enlarged, congested and tender ovaries, due to mechanical interference with the circulation. Frequently there is found some prolapse of the anterior vaginal wall; the bladder bulging into the passage makes a cystocele. The posterior vaginal wall is often inverted, and the posterior lip of the uterus appears to be of great length.

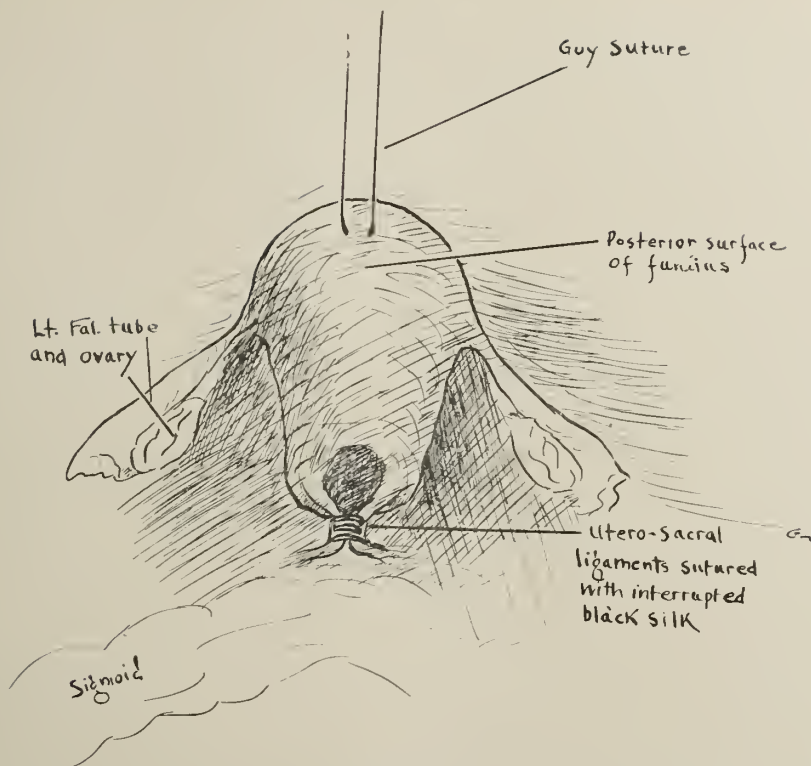


FIGURE 4

The fundus is elevated and pulled slightly forward. The utero-sacral ligaments are sutured and shortened by interrupted black silk.

Therapy

If a movable uterus does not become symptom-free following use of a properly fitted pessary, then relief by operation should not be expected.

Conversely, if a retroverted uterus is elevated and held in anteversion by a pessary causing a disappearance of symptoms, then suspension operation would be justified (figure 2).

Retroversion of long standing may be benefitted by hot sitz baths, douches and exercises. Congestion may be relieved with some temporary alleviation of symptoms. This applies to the fixed adherent type, but permanent relief requires operation. This is especially true in cases of retrodisplacement associated with chronic inflammation.

No one operation is applicable to every case of displacement. The surgeon should be familiar with three or four methods of suspension and use the operation or combination of operations suitable in each individual patient.

It should be remembered that no suspension operation will be successful in the

presence of an unrepaired defect in the pelvic floor.

The operation of choice should not only conform to anatomic principles and relieve the patient's symptoms and disease, but should eliminate the possibility of subsequent complications, such as abdominal discomfort, spontaneous abortion, intestinal obstruction, and dystocia.

The upper pelvic floor is a principal support for the uterus and if there is a small cystocele and evidence or tendency to prolapse, the cardinal ligaments should be shortened, followed by advancement of bladder.

Once operation is decided upon, a technic should be used which permits the proper attention to pelvic disease and floor damage immediately preceding the suspension of the uterus.

In my experience, the angleworm reefing or plication of the round ligaments together with the shortening of the utero-sacral ligaments is the most satisfactory operation in non-sterile women. Practically any additional corrections concurrently found neces-

sary may be carried out in conjunction with this procedure (figure 3).

The principal criticism of plication or attaching ligaments anteriorly or posteriorly to uterus is that these operations utilize the strong part of the ligament but leave the uterus to pull on the weakest portion, which runs into the inguinal canal. When we consider the function of the round ligaments as above described, and if the utero-sacral ligaments are plicated when necessary, the criticism does not seem justified (figure 4).

In the presence of adhesions or ovarian or tubal disease, it is probably the operation of choice, especially if the utero-sacral ligaments are shortened when indicated. Moderate cystocele can be easily corrected in conjunction with this operation by simple bladder advancement.

Future pregnancy and labor are not interfered with by this procedure.

Hypogastric pains, nausea and abortions are averted, and traps causing intestinal obstruction are not present following this operation.

Uterine poise is restored with freedom of oscillation between symphysis pubis and promontory of sacrum.

Summary

1. Retroversion per se seldom causes symptoms. Many women with postural abnormalities center their thoughts on the pelvis and on examination a perfectly normal uterus lying in retroversion is blamed for the pain. Even though the uterus is freely movable and the adnexa normal, unfortunately a suspension operation is frequently advised and performed. An orthopedic examination might have revealed a postural strain and the suspension would have been averted. Treatment based on mechanical and orthopedic principles should be remembered in this type of patient. The general systemic condition and particularly an evaluation of the endocrine system should be carefully studied.

2. Familiarity with normal and abnormal structures in the pelvis is essential before considering any pelvic operation.

3. If an operation is to be done, conservative surgery should be practiced. That is: an operation with a minimum of trauma

and time, that corrects the abnormal position, allows the proper care of disease and repair of pelvic floor damage and averts the possibility of future complications.

4. The plication or reefing of the round and utero-sacral ligaments in my opinion is the operation of choice.

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CHANGING AN "OLD SOUTHERN CUSTOM"

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There are many old Southern customs of which we can be justly proud, but midwifery is not one of them. Midwifery in North America is now largely confined to the Southern states. Over 20,000 mothers in Georgia are delivered by midwives each year. While this picture does not cause us to swell with pride, it should cause us to seriously consider how best to modernize outmoded maternity care practices. The medical profession must adopt a more realistic attitude toward this problem; otherwise the laity can be counted upon to chart the course of its future developments.

Responsibility for modernizing maternity care rests squarely upon the shoulders of the medical profession, for it alone is best prepared to evolve a satisfactory plan. Although it is not the sole responsibility of public health to launch a modernized maternity program, it does appear to be within the realm of public health activities to focus attention upon the subject and attempt to promulgate reasonable and practical measures for bettering maternal care. For this reason, I am presenting the subject for consideration and action.

There is no quick and easy solution.

Director, Division of Maternal and Child Health, Georgia Department of Public Health.
Read before the Medical Association of Georgia, Savannah, May 10, 1944.

Money, experimentation and time will be required to work out the best answer to the problem. The important question is, When do we start on the journey and how can we avoid mistaking a detour for the main highway?

Though midwifery constitutes the most acute symptom of our ailing maternal care system, many "sub-clinical" manifestations are demonstrable when a thorough examination is made. I am not inferring that a solution to the midwife problem is the answer to the varied maternity problems or that it has any priority over other aspects of the program. Solving the midwife problem will, however, automatically point the way toward the correction of related phases which need adjustment.

Those of us born and reared in the South are acquainted with the term "midwife" but few of us know midwives intimately. Though I am told that the only attendant at my birth was one of these honorable and superstitious souls, I strongly disfavor the continuation of this class of attendant for a third of Georgia's mothers each year.

Midwifery in Georgia has existed since Oglethorpe founded the Georgia Colony 211 years ago. Time is said to change all things but midwifery is the exception that proves the rule. It seems to have a remarkable degree of resistance to progress. If we could borrow Alley Oop's time machine and transport one of our aged, superstitious midwives from rural Georgia back through time to Rome of twenty centuries ago, she would not be cast to the lions. She would probably deliver Cornelia of one of her "jewels" and go quite undetected as a stranger.

You may ask why this insistence on immediate changes in this old Southern custom. There are many reasons. Dare we continue to delegate a difficult medical procedure to an ignorant, untrained person? Those physicians who have wrestled with obstetric complications can appreciate the absurdity of expecting midwives to care for such cases. Those who have witnessed the sudden appearance of unsuspected conditions also realize the impossibility of screening out abnormal cases from among the midwife clientele. Those who have attempt-

ed to instruct midwives testify that, as individuals or groups, they are not teachable and will not discard their ingrained ideas and notions, however false and illogical they may be. As an example of this, I cite the experience of a nurse-midwife who worked intensively with lay midwives in one Georgia county for a year. Despite all her teaching of the importance of giving sterile water to newborn infants, the grannies steadfastly refused to substitute this innocuous fluid for their favorite cockroach tea. The reduction from 9,000 midwives in 1924 to 2,400 in 1943, reveals the urgent need for replacing midwives with professional attendants. *Many communities are now without either the services of a physician or a midwife*, and neighbors are re-entering the picture as attendants. This is retrogression indeed.

Some feel that development of a new type of attendant is advisable, but this is dangerous for it would delay the time when adequate care will be made available. Establishment of new schools and the expenditure of vast sums of money would be necessary. Even then an unsatisfactory attendant would result. If other than medical attendants are acceptable, why not superimpose midwife training on basic nursing training and utilize an already established facility? It should be remembered also that midwifery is not lucrative and that, even if better trained attendants were secured, they would have to be paid for their services. Should public funds be expended for non-professional health services?

Occasionally in discussing this subject, I am told that midwives have been known to secure better results than physicians. Such statements are subject to disputation. Surely trained physicians can practice better obstetrics than midwives. If I did not think so I would not be interested in medicine as a profession. Some physicians feel that the situation should not be disturbed, which seems both an unrealistic attitude and an attempt to avoid the issue.

After endeavoring to control midwife activities over a period of years, I am convinced that the only answer is to develop a substitute program which will provide professional care for lay midwife cases,

thus removing the need for lay midwifery. Such a program should include facilities for the entire maternity case load, as the requirements of all groups could be met by a single community facility.

The present attempt to regiment the medical profession is an excellent example of current trends to develop overnight a program that should require 25 years to evolve. I am unalterably opposed to these schemes, which disregard many fundamental factors of human behavior, but I do belong to the group which believes that some changes are not only desirable but inevitable.

When considering the development of a broad maternity program, certain points deserve special consideration if good care is to be assured. Adequate financial support must be provided. The program must be based upon sound plans and a majority of the physicians should voluntarily subscribe to its professional aspects. When necessary, consultative service or transfer of cases to suitable facility must be provided for in an emergency. The usual relationship existing between physician and patient should be preserved. The administration of the professional phase of the program must only be entrusted to adequately trained and experienced medical personnel. Requirements for good obstetric and newborn care should be met. Regardless of type, facilities should be planned so as to include all social, economic and racial groups. The public must not view the program as a charity adventure, but cost for medical indigent cases should be adapted to individual family resources. Sufficient local autonomy must be provided so the program can be adapted to existing situations. Last but not least, *it is important that such a program be the outgrowth of local interest and not be imposed by a state or federal agency.*

At this point I shall "rush in where angels fear to tread" and risk offering four basic plans which might provide professional attendants for all confinement cases. The first plan is concerned with extension of hospital facilities; the second plan is based upon the belief that maternity shelters are feasible; the third is concerned with the utilization of office delivery facilities and

the fourth recognizes the necessity for continuing home care in some localities.

In discussing the first plan suggested, extension of existing hospital facilities, I would like to comment on present hospital standards of care. Hospital care must in some way be standardized and improved before public funds are used to purchase such care. Georgia hospitals do not provide an adequate service for maternity cases and newborn infants. This situation was forcibly brought to mind when the Emergency Maternity and Infant Care Program for dependents of members of the armed forces made it necessary to inspect all hospitals in the State. Not one hospital inspected could meet desirable standards. This situation need not cause us to develop a depressive psychosis but it should not be ignored. Time will be required to attain proper standards of hospital care but the question is, When shall we begin? The medical staffs of hospitals must assume more responsibility for improving hospital services. Standards of care must be adapted to varying hospital situations if we are to avoid needless impositions on the smaller hospitals, without of course compromising with basic needs.

A hospital for every county is neither logical nor practical. Small populations and lack of finances make it impossible for many counties to construct or maintain efficient hospitals. It does not seem wise to plan for a hospital unless a medical staff can be supported by the locality maintaining the hospital. Otherwise only a building is available. Medicine is too complex these days to make specialists constantly available in every county. It might be better to plan for district hospitals, as experience has taught that the smallest hospital that can be operated economically must have a minimum of 100 beds. Relatively few hospitals in Georgia have this number of beds and, in many instances, the physician spends his money to support his hospital instead of his family. If the standards of care are raised, the economic burden will be heavier.

There would appear to be two stages in the development of hospital facilities; namely, providing immediate care for complicated cases and eventually expanding so

that all cases may be served. A considerable amount of funds for construction and maintenance will be necessary. Thorough analyses are essential if a logical plan is evolved and the project is to succeed. It is hoped that public health will meet its responsibility in the gathering of data and promulgation of plans based upon experience gained from previous efforts of experimenters in this field of medicine.

The increasing hospital obstetric load is reason for concern unless precautions are taken to provide better care. Since most hospitals cannot accommodate present obstetric load, the absorbing of midwife cases would necessarily require extensive changes in hospital facilities. In addition, political subdivisions must be convinced of their obligation to meet at least a part of the cost of this service. A start could be made in this direction if hospitals would take the necessary steps to obtain payment for cases now accepted as emergencies, usually with expenses borne by the hospital.

Before concluding the hospital picture it should be pointed out that in some localities the use of one hospital for maternity care, rather than several, would permit a better care program. The use of hospital facilities in such a manner as to refrain from interfering with private practice and yet serve midwife cases is now being demonstrated within the State of Georgia.

My second suggestion for modernizing maternity care is the development of maternity shelters in those counties which are unable to support a hospital. One such facility has been established in the State and another will soon be put into operation. A maternity shelter may be defined as a structure that provides hospital-type care for normal obstetric cases. In addition to providing accommodations available in ordinary homes, maternity shelters must supply certain minimum additions, such as utility room, nursery, delivery room, facilities for sterilizing supplies and other necessary equipment. Since the size and arrangement of such facilities are an individual problem, no suggestions will be offered other than that plans should be carefully reviewed before being adopted.

A maternity shelter has disadvantages in that it provides care for normal cases only, requires hospital affiliation, does not provide medical care for non-obstetric conditions and is not feasible for communities with small case load. On the other side of the ledger, however, are many advantages. The maternity shelter conserves the physician's time and effort, thus increasing coverage; offers a solution to the midwife problem; assures acceptable working conditions for all physicians, thus encouraging the practice of obstetrics and avoiding the maintenance of individual facilities; inhibits radical procedures because of convenience in allowing cases to have tests of labor while under supervision; assures qualified nursing service; provides essential equipment, supplies, etc.; is more economical than hospitalization; encourages community financial support; aids in proper distribution of physicians in rural areas; provides care for all expectant mothers; avoids such regimentation of medical profession as is now embodied in proposed legislation; provides premature infant care; and furnishes constant nursing care and supervision, which is both impossible and uneconomical in the home.

Maternity shelters are offered as second choice because they are far superior to office delivery facilities. The chief argument against shelters is that they are costly. Naturally a higher type of service is more expensive. After all, the cheapest method is to allow neighbors to deliver mothers in the home. Shall we economize at the expense of mothers?

The third approach to the problem is the extension of office delivery facilities in areas where maternity shelters are not feasible. During the last six months almost every office delivery facility in Georgia has been inspected and services evaluated. Not one of them offers services comparable to that provided in shelters and none of them meet acceptable standards. Yet there is a great need for them in some localities. Use of office delivery facilities should be encouraged when the following conditions prevail: no better facility can be provided; care is of acceptable quality; hospital care is as-

sured when necessary; adequate prenatal and postpartum care are available; transportation facilities are available; consultation service is assured; and facility is not a financial liability to the physician concerned.

Six such facilities are now in existence in one county. It is reasonable to believe that replacing them by a single shelter would secure more efficient and economical care. No one who has analyzed maternal and infant mortality and morbidity doubts the necessity for nursing care beyond the time obstetric cases are kept in an office delivery facility. Care in an office delivery facility is superior to home care only when facility is competently operated. In any event, midwifery will remain in status quo until office delivery facilities arrange to accommodate cases now served by midwives or other plans are developed.

The fourth and last basic plan is the increasingly unpopular home delivery. This is the safer plan unless proper precautions are exercised in the operation of other facilities, including hospitals. Home deliveries should be confined to areas where an inadequate case load makes operation of a central facility impractical. The present home delivery program could be improved by providing: nursing assistance at delivery; proper packs to assure necessary equipment and supplies; adequate prenatal and postpartum medical and nursing care; hospital care when necessary; and compensation of physician for services rendered.

A careful appraisal of the present distribution of physicians leads to the conclusion that in selected areas it would be advisable to utilize the services of nurse-midwives in order to provide a professional attendant. Though this suggestion will meet with opposition, it is a demonstrated fact that satisfactory services have been provided by properly trained nurse-midwives. There is no reason to fear that nurse-midwifery would absorb the physicians' obstetric practice. Adequate safeguards can be established to limit nurse-midwifery to cases that cannot be served by physicians. It would not be necessary to license such individuals because nurse-midwives could serve as

agents of physicians, thus permitting assignment of cases on an individual basis. No new licensure problem would thereby be created. The necessity for assuring medical supervision of nurse-midwife cases is apparent. Ample provision must be made for the prompt transfer of complicated cases to physicians. Nurse-midwives could well be utilized in hospitals and maternity shelters where medical services are not available. Let us not decry the use of nurse-midwives where necessary until a satisfactory substitute is offered or until the suggestion has had the consideration it merits.

We must be prepared for those inevitable reactions of discontent and dissent that characterize each new undertaking of this kind, professional or non-professional. Too often in the past, physicians have approved local plans for medical care even though they were opposed to them. Usually such plans are inadequately evaluated by physicians and often plans are formulated without consulting the physicians concerned. Frequently the pressure of public opinion or the action of a fellow practitioner causes general acquiescence by the local physicians. All too often physicians have subscribed to a medical plan with the mental reservation that the program was impractical. In the future it is essential that we be more deliberate and careful in our acceptance of a medical care plan for the failure of these projects usually reflects unfavorably upon the profession, regardless of where the fault lies.

This attempt to outline solutions to the midwife problem is the result of a sincere conviction that changes are inevitable. The need for general appraisal of maternity care standards has been emphasized in the hope that interest will be kindled. It remains for the medical profession to determine what action, if any, shall be taken.

DISCUSSION ON PAPERS OF DRs. PERSALL AND TORPIN:
GREENBLATT,* GREENE AND WATSON

Dr. M. T. Harrison (Atlanta): These papers have been most excellently presented. There is no part of any of them that I could criticize if I chose.

Concerning Dr. Persall's paper on placenta praevia, to

*Dr. Greenblatt's paper was not submitted for publication. A similar paper by him appeared in *The Journal of the American Medical Association* 126:3, page 161, Sept. 16, 1944.

my mind it is equally important to have the cooperation of the patient. The patient must be so impressed concerning her health and the safety of the baby that if she should have a painless and apparently causeless hemorrhage in the third trimester of pregnancy she would immediately consult her physician. Blood transfusions are invaluable in the treatment of placenta praevia, but if the patient has been seen early after the onset of symptoms of this complication measures may be instituted which may prevent her condition from becoming grave. Early treatment plus blood transfusions as indicated result in a lowered mortality of mothers and babies.

I was particularly pleased to hear Dr. Greene bring forth merits of Long's suspension of the uterus. It is a suspension, as he said, popularized by the late Dr. E. C. Davis and while others are good I think this is a most excellent type of suspension. Among other advantages it leaves fewer pockets for the possibility of intestinal obstruction. While obstructions occur very infrequently following the various types of suspension, we would like for it to occur with even less frequency.

Another thing he emphasized that many essayists frequently forget to mention or if they mention it do so merely in passing is the necessity for building up an adequate perineal support. A suspension, regardless of its type, will give incomplete relief unless there is an adequate perineal floor.

Dr. Gordon G. Allison (Atlanta): I have always admired Dr. Greenblatt and thought well of his work. He now is wiser than I thought in the beginning since hearing what he said with reference to over optimism in the use of penicillin. I cannot help but stress a few things that I do not believe are well appreciated by the general group of doctors throughout the State, and that is the knowledge that the sulfonamides have failed and are increasing failing in the cure of gonorrhea. If any of you had read Dr. Pelouz's article published in the *American Journal of Urology* back in 1936, just before the era of the sulfonamides, you would have been impressed then as to the possibility of drugs that are effective in the relief of this disease. After the sulfonamides came to us he was still further criticized and some of the urologists laughed at him for his continual plea to be cautious. Dr. Greenblatt stated that we should still be cautious of too great an advantage with the use of the newer drugs, particularly penicillin. I think it is well that we all bear that in mind. Let me state that my criticism is with the sulfonamides and not with penicillin.

What I have to say with reference to the sulfonamides has been our findings at the City Venereal Disease Clinic in Atlanta. About three weeks ago we sent a young man who had gonorrhea to Dr. Greenblatt. He was given 150,000 units of penicillin, patted on the back and sent back home as cured. Two days later he came to my office with bilateral epididymitis. The gonococcus has been recultured in this young man. He is not well after having the maximum dose of penicillin.

Now I'd like to say something with reference to these approximate 5 per cent failures. I have noticed that in those who have had difficulty in attaining cure with penicillin in the Atlanta area, all of these to my knowledge

have had large doses of the sulfonamides, but still more pertinent is this—that these individuals have been treated with many types of the sulfonamides. They became chemoresistant to the first and then their doctors prescribed a second, and even a third drug, going to sulfathiazole, to sulfadiazine and later to sulfamerizine. Let us ask what happened to the gonococcus; after it was resistant to all three sulfonamides it became more potent, more active; it has been able to tolerate different types of the sulfonamides and it is in these cases that failure has occurred with penicillin. I have had the good fortune to see some ten married couples who have had chemoresistant gonorrhea. They all had a new kind of gonorrhea—supra severe gonorrhea. I do not know what can be done with these unfortunate individuals when they have had excessive doses of the sulfonamides. I thought at one time I knew how to treat gonorrhea, but since I have observed these people I begin to wonder if there is anything that can be done, and may I tell you gentlemen that if we continue to give the sulfonamides in the dosages that we should not use I fear a great deal of trouble is coming to us in the future. This is in keeping with what Dr. Pelouz has recently warned us and I think it behooves each of us to beware and be cautious in the use of sulfonamides in the future with reference to gonorrhea.

I think it is well, likewise, that we take further stock in sulfonamide therapy with reference to other diseases such as pneumonia and meningococcus infections. If the increased virulence or activity of gonococcus can be obtained by the use of such sulfa drugs, what would happen to our populace if the same becomes true of the pneumococcus or meningococcus? I cannot help but wonder if such changes will come to us and if it will not be a serious issue in the near future. May we remember that the sulfonamides are man made, whereas penicillin is a product of nature or God's drug. If we stop using the sulfonamides, penicillin may remain a potent drug with a 100 per cent cure rate in gonococcal infections.

SEPTEMBER INDUSTRY REPORT ON PULP AND PAPER

Reports indicate that despite a substantially improved pulpwood situation respecting both receipts and inventories, the prospect for increasing wood pulp and paper production in the next few months is handicapped because of the critical shortage of logging trucks and tires and a growing tightness in labor supply at the pulp mills.

Whether or not wood can be moved to the mills in future months depends upon the availability of heavy duty tires. These tires have been given the highest priority for civilian use, but promise to remain an acute problem.

Military and government requirements for most classes of paper and paper-board currently are at the highest levels ever reached. Recently the War Production Board placed all paper, pulpwood, wood pulp and waste paper in group I on the Critical Products List.

EYE INJURIES AT AN AIRCRAFT PLANT

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A series of 404 eye injuries, observed between January, 1942, and October, 1943, is presented, with an evaluation of some of the clinical and therapeutic problems encountered in industrial ophthalmologic practice at an aircraft plant.

In most instances the traumatic agents in these cases were either particles of concrete or similar materials, or various types of metals, in particular aluminum and light alloys used in the construction of aeroplanes.

Early recognition and treatment are imperative in all ocular injuries because the tendency of many reparative processes in the eye is toward the formation of non-transparent tissue. Failure to report at once after an accident involving the eye structures often results in incapacitating pain and involvement of the iris and ciliary body. When, in this series, the injury did not respond to adequate local therapy, syphilis was suspected and found responsible in a great number of cases. The average man-hour loss resulting from eye injuries was appreciably decreased when pre-employment examination and serologic tests were used to rule out those individuals with physical defects and systemic diseases such as syphilis.

When the foreign body in the cornea is metallic, an oxidization ring will form in the substantia propria of the cornea, depending on the time during which the fragment remains embedded. This will result in even greater inflammation of the iris and ciliary body than that caused by the foreign body, and renders its removal far more difficult.

A technic was devised by which the patient's head was fixed firmly against the chin rest and forehead bar of the slit-lamp microscope. For analgesia of the eye, a so-

lution of $1\frac{1}{2}$ per cent of pontocaine was used. Dissection and removal of all embedded particles with various spuds was done under direct observation with the microscope (20x-40x). As a rule the inflammatory reaction would begin to subside at once, thus reducing the time loss.

TABLE 1

<i>Type of Injury</i>	<i>No. of Cases</i>
Foreign body of the cornea.....	148
Foreign body of the conjunctiva.....	12
Foreign body in upper cul-de-sac.....	19
Foreign body in lower cul-de-sac.....	11
Traumatic and chemical conjunctivitis.....	85
Traumatic iritis, iridocyclitis.....	29
Laceration of the cornea.....	15
Acitinic burn of the cornea.....	21
Thermal burn of the cornea.....	8
Chemical burn of the cornea.....	7
Abrasion of the cornea.....	7
Abrasion of the conjunctiva.....	6
Laceration of the eyelids.....	3
Laceration of the conjunctiva.....	5
Traumatic infection of the eyelids.....	7
Traumatic injury of the lids, resulting in chalazion.....	7
Subconjunctival abscess.....	3
Traumatic cataract.....	2
Scleral laceration.....	1
Hemorrhage into anterior chamber.....	1
Fracture of orbital rim.....	2
Intraocular foreign body.....	2
Penetrating laceration of cornea, iris, lens.....	2
Avulsion of the eye.....	1
Total.....	404

Scant attention has been paid heretofore to a chemical sensitivity of the eye structure to aluminum compounds. However, most of the cases listed under traumatic and chemical conjunctivitis were those in which small particles of this metal were adhering to the surface of the conjunctiva. The eye remained inflamed for several days after the removal of the aluminum particles, in contrast to the quick recovery observed with other types of foreign bodies. However, aluminum particles are projected rarely through the sclera for they are lighter, and being usually round, offer no sharp edges.

Foreign bodies are found more frequently in the lower than the upper cul-de-sac. The apparent discrepancy in table 1 is explained by the fact that first aid personnel found it more difficult to remove those be-

From the Ponce de Leon Eye and Ear Infirmary, Atlanta, and the Marietta (Georgia) Aircraft Assembly Plant.

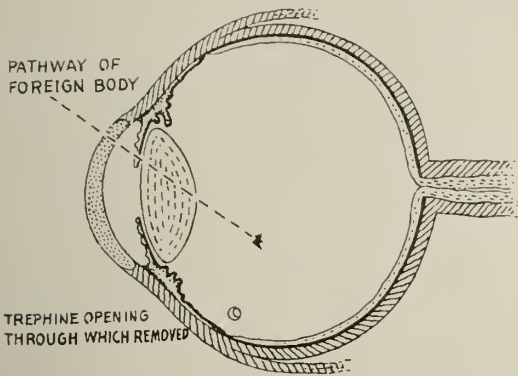


Figure 1. Diagram of pathway and position of the intra-ocular body in first case report. The trephine opening is just anterior to the anterior extremity of the retina, a relatively avascular area of the choroid.

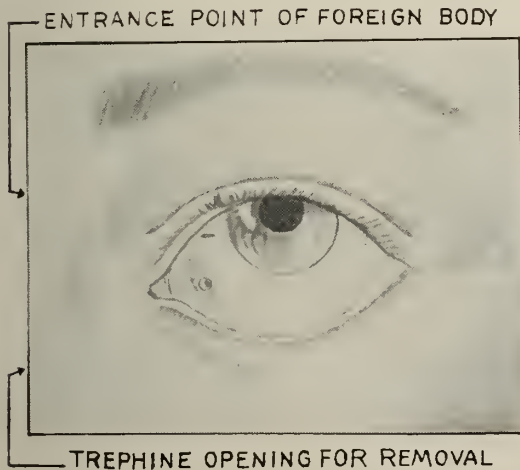


Figure 2. Second intra-ocular case reported, showing the point of entrance. The trephine area can be seen in the lower nasal quadrant.

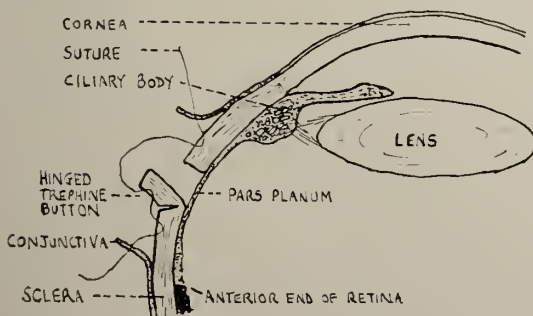


Figure 3. The trephine flap is diagramed in profile. By tying the suture the flap is replaced and the conjunctiva is approximated.

neath the upper lid, and referred them more frequently to the ophthalmologist.

Since welders usually protect themselves with proper shields, actinic burns nearly always occur in the eyes of their helpers and other nearby workers not so well protected. Despite the reported therapeutic advantages of infra-red radiation, this was not used pending further evaluation of its effectiveness. Pontocaine was sufficient to relieve the pain, and vitamin eye ointments such as Ophthalmol A. & D. seemed to accelerate the formation of new tissue.

Both cases of traumatic cataract were caused by severe non-penetrating injuries of the eye. The corrected visual acuity obtained after surgery in each case was 20/25. However, because of the difference in the size of the retinal image in the normal and aphakic eye, fusion could not be attained and double vision resulted. Fusion and single binocular vision can be provided for such patients by fitting a contact lens over the aphakic eye. Psychologic and economic obstacles, however, often render this impracticable. To overcome the disturbance caused by double vision, the eye operated on is not corrected with a lens, and the normal eye provides monocular vision.

The scleral laceration was caused by the sharp edge of a large piece of metal which cut tangentially at the equatorial portion of the eye into but not through the choroid. The sclera was sutured without delay, no vitreous was lost, and normal vision maintained.

The case reports of the intraocular foreign bodies are given in detail.

An electrician, aged 31, was drilling a hole through an angle iron when he felt a sharp pain in the right eye. He reported to a first aid station where no foreign body was detected. He was seen by the ophthalmologist two weeks after the injury. Vision was 20/30 and examination showed a small mobile fragment of iris free in the anterior chamber which, due to the thermal circulation of the aqueous, was in constant motion. The opacity of the lens was minute and linear. The foreign body could not be seen with the ophthalmoscope, but x-ray examination localized it accurately. The path of entry and its position are shown in figure 1.

The patient was hospitalized and attempts were made with the giant eye magnet to pull the foreign body into the anterior chamber. This would have diminished the operative risks, for a simple limbal incision would have permitted extraction. Despite such attempts for five con-

secutive days, the foreign body could not be moved. A trephine opening was made in the avascular area between the ciliary body and the thick portion of choroid, as shown in figure 1. By placing the tip of the magnet at this opening and moving the eye about slightly, the steel fragment was removed. The scleral button was replaced and sutured in position and the patient was allowed to leave the hospital in 10 days. A month later 20/20 vision was obtained with a cylindric lens of considerable power, for at first the lenticular opacity did not spread. Six months later, however, the vision had diminished to 20/400, and the traumatic cataract was removed. Corrected vision, 20/20.

The second case was that of a riveter, aged 28, who tapped an oily piece of steel plate with a hammer and thought something had hit him in the left eye. The stinging lasted only a few seconds and no further pain occurred. Vision was 20/15. Examination of the left eye showed a small droplet of oil beneath the conjunctiva. By enlarging the small conjunctival laceration and examining the sclera with the slit lamp, a minute incision could be seen near the horizontal line of the eye 5 mm. medial to the limbus, as shown in figure 2. X-ray examination localized the foreign body almost in the optic axis 4 mm. from the posterior surface of the lens. Because the lens was uninjured and the anterior segment normal, no attempt was made to draw the foreign body into the anterior chamber. Sutures were placed on each side of the incision made by the entering body and the wound was made to open as widely as possible by traction on the sutures. The magnet was placed almost in contact with the lips of the incision, but despite repeated maneuvers the foreign body could not be extracted. A 2 mm. trephine opening was made over the pars ciliaris of the choroid, midway between the horizontal and vertical meridians. By holding the trephine at a slight angle to avoid cutting through the entire sclera, a hinge was formed on which the button could be folded back. A suture was placed for closure after completion of the procedure, as illustrated in figure 3. Despite prolonged manipulation of the eye in different positions, the foreign body could not be extracted. A small magnetizable forceps, the tip of the handle being in contact with the magnet, was directed toward the foreign body through the trephine opening. Without attempting to open the forceps, a piece of steel 3 mm. long, 1 mm. wide, 1/2 mm. thick, was removed. The suture, already in place, was tied, and the patient hospitalized for one week. Vision at this time was 20/15 and showed no change 3 months later.

Of the entire series, only three eyes were totally lost. The first was an avulsion of the eye by the "kicking" of the crank of a concrete mixer. The other two were penetrating injuries of the cornea, iris and lens. One of these was caused by the shattering of the workman's own glasses and the other by a very large piece of steel which severed the anterior segment, resulting in loss of all of the aqueous and parts of the lens and vitreous.

In summary, a series of 404 eye injuries observed at an aircraft plant has been reviewed. A technical procedure evolved for the removal of minute foreign bodies of the cornea has been described. Attention has been called to the chemical sensitiveness of the eye to aluminum particles and two reports of successful extractions of intraocular foreign bodies have been presented.

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WATER PURIFICATION

A new process for water purification, developed by The Mathieson Alkali Works, for the removal of "chlorophenol" taste and odor was described by G. P. Vincent, of the Mathieson research and development department, at the recent meeting (September 15) of the American Chemical Society in New York.

The process as described by Dr. Vincent consists of pretreatment with chlorine to sterilize the water, followed by treatment with chlorine dioxide to remove taste and odor caused by phenolic waste. The chlorine dioxide is generated by dispensing a sodium chlorite solution into the discharge line of a Wallace and Tiernan chlorinator. A constant dosage of 0.5 ppm available chlorine is maintained, which, it is claimed, is sufficient to remove all taste in a severely contaminated water.

Following experiments with the process on a laboratory scale, plant-scale operations were carried out at an auxiliary filter plant of the City of Niagara Falls Water Department. This plant, which supplies three to eight million gallons of water per day, has an "on-shore" intake which often became so contaminated with phenolic compounds, according to Dr. Vincent, that the customary method of treatment was inadequate. Variations in the degree of contamination aggravated the problem.

Three months of operation with the chlorine dioxide process demonstrated that it destroys phenolic taste and odor permanently and completely, Dr. Vincent stated. Additional advantages claimed for the process are considerably reduced chemical costs and simplified plant operations. The process is now used for purification of the entire Niagara Falls water supply.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

Things To Remember

The year 1944 is nearing a close. That it has been one of the most eventful years of history cannot be denied. War and all the unpleasant things that go with it have placed additional burdens on everyone. The medical profession has cooperated in all new problems, but there are some things all of us should remember. Listed below are a few of them:

1. The Wagner-Murray-Dingell Bill has not been beaten. It cannot be beaten unless every physician does his or her part to enlighten our senators and representatives in the Congress of the United States regarding its implications. Read it and then please sit down and write them. Yes, you are busy, but will you continue to practice medicine your way if this bill is enacted into law?

2. On other pages of this Journal—the pages devoted to the news from the Georgia Department of Health—is a proposal to improve health conditions in Georgia. Please study it carefully, for when the General Assembly meets next January this proposal may be another legislative act for our State.

3. On the editorial pages of this number of *The Journal* is reprinted an editorial from *The Journal of the Medical Society of the State of New York*. It is worth reading, and reflects some of the work being done in one of our great industrial states: work to solve medical, hospital and nursing care problems. Georgia is largely a rural state. The question is: What can we do to help solve similar problems for our people?

The Committee on Public Policy and Legislation of our Association will be glad to have your suggestions for the improvement of health facilities in Georgia. Communications should be directed to Dr. Spencer A. Kirkland, chairman. 478 Peachtree St., N. E., Atlanta.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

OCTOBER, 1944

SURGICAL PROGRESS IN TWO WARS

It is doubtful if any other period of ten or fifteen years in the history of surgery can show as great progress as the past decade or two. The outstanding achievements of this time, of course, have been the utilization of the sulfonamide drugs, blood plasma and penicillin. Blood transfusion might fairly be included since it has been only in this time that this agent has been used regularly and in sufficiently large quantities to judge of its efficiency. While it is impossible to condemn the fearful institution of war adequately, it must be admitted that the recent unprecedented progress in surgical methods and results is due more to the war than to any other factor. To have to resort to the horrors and heartaches of such a conflict to accomplish anything good can have no justification, but inasmuch as the war was inevitable and unpreventable use should be made of any beneficent result which might come from it. Thus has the healing art through all the ages been helped by war, as well illustrated in the lessons learned by Ambroise Paré in his classic experiences on the battlefields of France.

It is interesting in this connection to view the progress in surgery made in the two recent world wars. The main contributions of World War I to the science and art of surgery were the debridement of war wounds and the application to them of Dakin's chlorinated lime solution with Carrel's technic. Such therapy apparently produced satisfactory results in the hands of the medical officers of 1917-18, and saved lives and limbs. The experience of the writer in treating wounded soldiers during this period leads him to ask, Why were the results of the Carrel-Dakin technic in these cases so far superior to the results obtained later with the same method in civil life? It seemed impossible to obtain Dakin's so-

lution with the same potency. Perhaps the wartime preparation owed its efficacy to its freshness, or perhaps a pharmacist working in the theater of war naturally is more conscientious there than in civilian life, despite increased pay. Certainly the so-called Dakin's tablets put out as a substitute for the original solution have been a dismal failure.

Another valuable contribution of World War I to surgery as well as other branches of medicine was the scientific development of physiotherapy, now fortunately called physical medicine inasmuch as the name physiotherapy seems to suggest the work of the advertising cults. From the need of crippled soldiers for various forms of physical medicine, as demonstrated in this war, has grown a much-needed new specialty in medicine to which large sums of money have been donated for undergraduate and postgraduate instruction in medical schools, research work, and the establishment of departments in hospitals. Before the war interest in the subject was indifferent and the average medical practitioner knew but little if anything about it, thus lending aid to the growth of cults whose principal stock-in-trade is rubbing and the employment of impressive machine treatment.

Now comes the second World War with the additions of the sulfonamides, plasma and penicillin. The use of these agents during the comparative short time of the present conflict has established a record unparalleled in the history of the healing art. Thrilling stories have been recounted concerning the myriad lives and limbs which they have saved, and more will be heard of marvelous successes as time goes on.

These all but magic means of treatment probably have won a permanent place in our medical and surgical equipment, but will their final standing be as high as overwrought publicity has awarded them today? The Carrel-Dakin treatment of yesteryear, which we formerly hailed almost as perfection, is gone and nearly forgotten in a few short years, and the names of many other therapeutic agents could be added to a list of drugs and treatments which once were regarded as indispensable and now are heard of no more.

The answer is that it is not the number of patients successfully treated which determines the efficiency of any therapy, but the length of time the therapy has been employed. In the annals of medical history but very few therapeutic methods can stand this crucial test. Nevertheless we can never repay the debt which we owe these three outstanding agents for their merciful achievements in the present war. If they never perform any other miracles they and the men who have originated and promulgated them are entitled to undying fame and gratitude. If time and experience should dim the luster of such agents, may it not require another world war to produce other drugs and methods to supplant them with equal or greater success?

F. K. BOLAND, M.D.

"INSURE YOUR SELF RESPECT"

Under the above-captioned title appeared an article on the editorial pages of one of the best medical journals in the nation. It is quoted in full and is self-explanatory, except as to why this state medical organization is trying to sell itself and the public on voluntary health insurance plans. The facts are: the Medical Society of the State of New York maneuvered itself into a position and must now sell this plan to both its members and its public.

Read it, think about it, and talk about it with your confreres; and at all risks of being misunderstood get your mind working about and within the medicine of the future. Remember, your plan is not worth much to you alone; it must click with your brother doctors' plans and with what Mr. and Mrs. Public and all the little Publics want:

We approach the time when, once every four years, the country works itself into a pre-election froth. Authentic polls of the voters tell us (up to the moment the ballots are counted) just what is going to happen. The simplest action of any public official is scrutinized for political significance. The newspapers and the radio become profound political oracles. And the elected representatives of the people mend fences furiously throughout the length and breadth of the land, so that no voter shall stray from the corral.

At such a time one is particularly impressed with the wisdom of medical leadership which, so far, has kept the profession free of political alliances or entanglements of any kind. Whatever

party wins at the polls, whatever administration we may have to endure for another four years of broken promises, higher taxes and gobbledygook, medicine at least can go about its business relatively unhampered by commitments to anybody but the sick. We say relatively because recently the fashion seems to be for political administrations to annoy the profession with proposals to come and play in the government backyard, and perhaps to dabble around a little with the boys at the public trough.

Fortunately, even though the public health is at a high level, there is still a great deal to do to improve it. This is our concern. It is a full-time job. And at the moment, election or no election, come hell or high water, an important part of that job is the promotion of voluntary medical expense indemnity insurance. It doesn't matter in the least what party wins the election. The country has magnificently survived and with patience endured all kinds — good, bad or indifferent.

But unlike political administrations, medicine has to make good *all the time* or the people want to know how come? And the people will not take hokum for an answer. The Medical Society of the State of New York is officially committed to the proposition of voluntary medical expense indemnity insurance for the betterment of the individual and the collective health. It must make this system of self-respecting prepayment for medical care work with the help of the people themselves and free from political obscurantism. It will be quite a job, especially since we of medicine are short handed; but no matter, we can do it and call it by its right name into the bargain. Medicine is not hampered by the necessity for fence mending, elections, or any commitment to compel anybody to do anything about medical indemnity insurance, or the "political angles" inherent in any government controlled project.

When medicine deals directly with the people themselves on a voluntary basis there is safety and security for both.

POLIOMYELITIS

The peak of the 1944 epidemic of infantile paralysis for the nation as a whole apparently has been passed, and the incidence of the disease is now tapering off, according to the latest reports received by the National Foundation for Infantile Paralysis, Basil O'Connor, foundation president, declared recently.

The heaviest incidence of cases for the nation occurred in the week of September 2 when 1,683 cases were reported to the U. S. Public Health Service. The week of September 9 showed a drop to 1,487, and reports since then from epidemic states indicate the decline is continuing.

The total for the year up to September 9 was 10,959 cases, or more cases for the comparable period than at any time since America's worst epidemic year in 1916.

This year's total for the first 36 weeks is 2,030 cases higher than for the same period in 1931, which to date is the second highest epidemic year.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

THE HEALTH PANEL PROGRAM OF THE GEORGIA AGRICULTURAL AND INDUSTRIAL DEVELOPMENT BOARD

The General Assembly of Georgia, at the 1943 session, created a board called the Agricultural and Industrial Development Board and delegated to this board the responsibility of studying State resources and making recommendations for future development. The board, for the above purposes, grouped itself into seven panels: namely, Agriculture, Education, Government, Health, Industry, Public Works, and Trade. The Health Panel is composed of Dr. T. F. Abercrombie of Atlanta, chairman; Judge Blanton Fortson of Athens, and Mr. Wayne Tucker of Waynesboro.

The panel has adopted the following program for the initiation of health panel activities:

(1) Study and recommendations for state-wide public health program.

(2) Study and recommendations for state-wide hospital program.

(3) Study and recommendations for development of graduate training for public health workers.

(4) Study and recommendations for mental hygiene program.

(5) Study and recommendations for other projects in connection with other panels of the board. Example: development of milk industry, building of public works projects such as water and sewage facilities.

The studies and recommendations for public health and hospital facilities have occupied the panel principally, however, because of the need for both and because of the possibility that funds might be made available for post-war projects. If such funds are made available and plans are not well advanced, such funds might be lost for this purpose.

Physicians are well aware of the conditions that prevail in Georgia and are, or should be, as much or more interested in the development of better medical and public health facilities than any other group of persons in the State. Neither the members of the panel nor the director is interested in developing any type of "socialized medicine" scheme but rather we are interested in developing a health program along more realistic and practical lines which will utilize all the better features of individual practices.

Studies are being made in each county of those factors which basically influence health conditions in that county. Since these conditions are well known in general suppose we enumerate them briefly:

(1) *Low income and low per capita wealth*, which in turn cause shortages of physicians,

nurses, dentists, etc., a shortage of medical facilities such as hospitals, clinics, and public health programs because local governments are unable to furnish them, and a sparsity of population coupled with low income in more rural areas make the private operation of such facilities unprofitable.

(2) *Lack of education*: the need of medical and public health facilities haven't been felt in many communities because of lack of knowledge as to their benefits. This lack of education has been particularly noted in the public health programs against syphilis and tuberculosis.

(3) *Poor sanitation and climatic conditions* favoring insect propagation also play a very important role in the spread of enteric, parasitic, and vector-borne diseases.

(4) *Malnutrition* as a result of low incomes, lack of education and soil depletion.

It is quite obvious that if per capita income and per capita wealth were high enough (and that the difference between the lowest and highest income groups were small enough), the law of supply and demand would operate to increase medical and public health facilities to a desirable level. This is the most *idealistic* and *socialistic* approach that could possibly be made toward solving the medical problems of Georgia. Those who advocate this method as the sole approach to the problem are either camouflaging their desire for conditions to remain as they are at present or they must be more optimistic than the past history and present conditions in Georgia seem to warrant. The opposite approach would be to reduce cost of care or apply some type of governmental subsidy for paying costs of care. If carried to extremes either approach is illogical, because the cost of medical care can be lowered sufficiently to solve the present problems only by lowering the standards of medical care practice below the present level, or if complete governmental subsidy is considered the answer then is the complete control of medicine would have to become a state function.

Any approach toward the problem should be founded on the following principles which have been advocated for years by the medical profession and which delegate responsibilities to both the community and the profession.

(1) The patient must retain the right of selecting his physician and, probably much more important, the physician must retain his right of selecting that branch of medicine in which he desires to practice.

(2) As our knowledge of diseases is increased, our standards of medical practice must be increased.

(3) The medical profession has the moral, and possibly legal, obligation to furnish a reason-

able amount of personal services to the indigent.

(4) The community (local, State, and Federal) has the responsibility of applying those protective measures which the profession has proven to be necessary in preventing the spread of disease.

(5) The community has the responsibility of providing the facilities needed for the care of the indigent.

It appears that none of these conditions is being fully met in any community by either the profession or the public, and in the belief that both the public and profession would welcome a proposal introducing these principles, the Agricultural and Industrial Development Board is being asked to submit the following program to the profession and to the 1945 General Assembly for their consideration:

A—Program for Basic Medical Facilities

That each county be *required* to have a hospital authority appointed by the elected officials, such authority to contain a representative from the local medical profession and the welfare director. That each county be required to levy a tax of 1 to 2 mills for the purposes of providing basic medical facilities and hospitalization. This authority would have full power and responsibility to set the standards for pay, part pay or free hospital care, and would have the right to issue bonds, accept gifts, lease, rent, build, buy or sell properties.

That the State provide (either by State or Federal and State) funds to subsidize counties in obtaining clinics and hospitals. It is proposed that combination health centers, out-patient clinics, dental clinics, and maternity shelters be erected in the smaller counties with a suggested standard of one to two beds per 1,000 population. It is proposed that in the larger counties hospitals be built or obtained to furnish additional beds for the area to bring the ration of beds to 3 per 1,000 population, and it is hoped that no subsidy would be granted unless these and other reasonable standards for size, type of construction, equipment, location, and open staff principles were met.

It is proposed that nine district tuberculosis sanatoriums be built to furnish an additional 1,500 beds for tuberculosis care and that counties or cities be required to furnish one-half the cost of caring for these patients.

It is proposed that additional grants be furnished the Richmond and Fulton County hospital authorities so that additional beds can be provided at the two medical schools for the development of medical centers where difficult diagnostic and treatment problems could be sent by physicians, clinics or hospital staffs.

Obviously these facilities could not be provided overnight, but they *must* be provided as rapidly as possible and when they have been completed, then the community has accepted its responsibility. There is no solution to Georgia's

health problems until these facilities have been provided.

B—Program for Public Health Measures

It is proposed that the State provide, with the aid of Federal funds, sufficient monies to the counties so that one public health nurse can be provided for each 5,000 persons, and one public health physician for each 30,000 persons. Portable micro-film x-ray outfits and a tuberculosis control officer for each 300,000 persons would be provided as would a venereal disease control officer, epidemiologist and maternal and child hygiene consultant. All of these four men would be well trained in their specialty and would be expected to serve local practitioners and hospitals as consultants when requested. Dentists, technicians, clerks, health educators and various public health specialists should be furnished so as to make a well rounded program. This personnel can be furnished at less than the accepted figure of \$1.00 per capita.

It would be expected that the basic medical facilities mentioned above would also be used by the public health workers, where feasible, so as to obviate the necessity for providing duplicate expensive buildings and equipment.

This program cannot be provided overnight even if funds were available, because Georgia lacks well trained medical, nursing and engineering public health personnel, but until this minimum personnel is furnished, the communities have not accepted their responsibilities and cannot expect the health problems to be solved.

C—Training of Professional Personnel

It is proposed that the State-Aid Program which provides hospitalization for indigent patients at Augusta be increased to \$75,000 per year and that local communities bear half these costs of hospitalization. This should provide sufficient clinical material for the State Medical School, and it must be accepted that the State has a definite responsibility to its medical school. If this responsibility is accepted the profession must provide nurses and physicians in sufficient numbers to provide the skilled services in public health and clinical medicine. Undergraduate and graduate training must be provided by both medical schools to develop the knowledge and skills necessary to furnish good medical care. Such training should not be limited to the pre-practicing years of the graduates.

It is quite obvious that a program of this type furnishes an opportunity and a challenge to the profession of this State. If the principles are sound the physician has an opportunity to advocate its adoption and to work toward its completion as rapidly as finances will allow. Georgia is not a rich state and it is quite doubtful that this program could be fully developed in less than 5-10 years. If the principle is unsound the profession has the very definite responsibility to the people of the state to advance a prac-

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.
 First Vice-President—Sister Mary Cornile, Atlanta.
 Second Vice-President—Vera Mingledorff, Griffin.
 Secretary—Mrs. Esther Watts, Columbus.
 Treasurer—Jane Van De Vrede, Smyrna.
 Chairman, Private Duty Section, G.S.N.A.—Mrs. Lilye W. Goodrum Geeslin, Atlanta.
 President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.
 Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.
 Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone Walnut 8911; residence, VERNON 1230.
 Executive Secretary—Durice Dickerson; headquarters 131 Forrest Ave., N. E., Atlanta; phone Walnut 8911; residence, JACKSON 7979.



MISS PHOEBE M. KANDEL

ANNOUNCEMENT OF THE ESTABLISHMENT OF UNIVERSITY OF GEORGIA SCHOOL OF NURSING

A five-year course leading to the degree of bachelor of science in nursing education will be established at the University of Georgia with the opening of the fall quarter, President Harmon W. Caldwell announced.

A survey made recently by the National Organization for Public Health Nursing of facilities for public health in Georgia has revealed a definite need for a program of nursing education in the State. "In accordance with the recommendations of the national organization," said President Caldwell. "Chancellor S. V. Sanford and the Board of Regents have authorized and directed the establishment of this curriculum.

"It is felt that there is a need for more nurses and for more nurses with better preparation for their work. As our State gives more thought to providing for the health of its citizens, the need for public health nurses in particular will grow. It is thought, too, that the University can render

a splendid public service by setting up a program for the education of nurses."

Miss Phoebe M. Kandel, who was placed in charge of the work last year, will serve as director of the permanent program.

During the past year 282 nurses received training in the University's pre-cadet nursing program which was established last September in cooperation with the Crawford W. Long, the Georgia Baptist, and the Piedmont hospitals, and 130 graduate nurses registered for one or more advanced courses in nursing education. The University will continue this work and will also continue to direct the cadet nursing program at the University System Junior College in Atlanta.

"The State will need many public health nurses in the post-war period and many nurses will be needed to help take care of returning service men and women," said Miss Kandel. "The program has been planned so as to provide adequate training for hospital clinical nursing service and public health nursing. Six quarters of work will be taken at the University before the student goes to the University Hospital in Augusta, or to some other hospital, for ten quarters of clinical practice and instruction. The student then returns to the University for an additional three quarters of academic work which is necessary in order to receive the degree of bachelor of science in nursing education. She is then qualified for positions such as assistant teacher in hospital or public health nursing services. The student upon completion of her hospital internship applies to the State Board for examination to become a registered nurse.

To be eligible for training during the fall quarter, the applicant must be a graduate of an accredited high school. Young women with junior college standing will be admitted in the winter quarter, beginning Jan. 2, 1945.

Miss Kandel is a graduate of the Frances Payne Bolton School of Nursing of Western Reserve University. She holds the degrees of bachelor of science and master of arts from Teachers' College, Columbia University. Her teaching career began at the Bellevue Hospital School of Nursing in New York City. She has served as director of the University of Cincinnati School of

(Continued on page 322)

WOMAN'S AUXILIARY : OFFICERS 1944-45

President—Mrs. W. T. Randolph, Winder.
 President-Elect—Mrs. Lucius N. Todd, R. F. D. No. 2, Augusta.
 First Vice-President—Mrs. Edgar H. Greene, 1442 Wesley Road, Atlanta.
 Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.
 Third Vice-President—Mrs. Leonard Massengale, Lumpkin.

Recording Secretary—Mrs. Charles Usher, 6 East Liberty St., Savannah.
 Corresponding Secretary—Mrs. Alex Russell, Winder.
 Treasurer—Mrs. Ralph Fowler, Marietta.
 Historian—Mrs. W. W. Puett, Norcross.
 Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.
 Press and Publicity—Mrs. Charles Daniel, College Park.

AUXILIARY NEWS

Mrs. W. T. Randolph, of Winder, has compiled a most interesting booklet which contains the program for the year's work. Taking as its theme "Health For Victory", the Auxiliary has embarked upon a broad program of health education not only for the present but for post-war plans. The program, recently approved by the Advisory Committee for the Medical Association of Georgia, includes the following subjects: Cancer, Nutrition, Tuberculosis, Venereal Diseases and Sex Education.

Mrs. Randolph says: "To each member of every auxiliary I send my personal greetings. May this be a good year for the Auxiliary and may we as auxiliary members serve faithfully every community to the best of our ability. The theme "Health for Victory" has more meaning each day as our men in the armed forces advance steadily on all fronts. We know that only healthy men could make these astounding military gains; and since health is our business, we are faced with a tremendous task on the home front.

"The medical profession has been called upon to contribute doctors to the war effort until no community has been left with adequate care for the civilian needs. The Auxiliary to the Medical Association can prove her worth more during these days than ever before. The program as planned for the year, if carried out fully by the larger organizations and in part by the smaller ones, can do much toward educating the public on matters concerning health and health education. It is our business to see that this information is available to every person desiring it and to educate others to appreciate its worth. It is my hope that the program plans for the year will be most helpful in carrying out the ideals and plans of each auxiliary in the state."

Mrs. Lucius N. Todd, president-elect and chairman of organization, has issued the following interesting message to auxiliary members throughout the State:

"These are momentous days for the medical profession. Socialized medicine and all that it implies is rearing its ugly head. The scarcity of doctors and the failure of the government to appreciate the importance of deferring pre-medical students all combine to make a very present

threat to the way of life of the doctor, his wife and family.

"We, as doctors' wives, cannot sit idly by with our hands folded and not do all that we possibly can to aid our husbands and the medical profession at large in their efforts to solve these problems. Our most effective work can be done only as a body, organized, and with certain definite aims in view.

"As chairman of organization it is my ambition and earnest hope that every doctor's wife in Georgia become a member of the Woman's Auxiliary. If there are doctors' wives in your community who are not members of the Auxiliary, they should be urged to join. If there are doctors' wives in neighboring communities, where no organization exists, they should be urged to form such an auxiliary. Only by presenting a united front can we doctors' wives render the effective service which is expected of us."

Dr. Ed Irwin and Dr. Robert L. Bennett of the Warm Springs Foundation were the featured speakers at a recent meeting of the Woman's Auxiliary to the Fulton County Medical Society. Mrs. John Turner, president, presided. Following the business session luncheon was served by Mrs. John Funke and her committee.

THE HEALTH PANEL PROGRAM OF THE GEORGIA AGRICULTURAL AND INDUSTRIAL DEVELOPMENT BOARD

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tical solution to following problems—problems which we think can be successfully solved by this program:

SYPHILIS—15 per cent of all inductees infected as demonstrated by continued positive serologic tests.

TUBERCULOSIS—1600 deaths per year for the past ten years.

MATERNAL CARE—For the past 10 years 38 per cent of mothers having neither pre-natal, natal nor post-natal care.

In advocating this program I want to make it a matter of public record that it is a combination of ideas advanced by Georgia physicians over a period of years and probably, if all phases are considered, it incorporates the great majority of principles set forth by these physicians.

RUFUS F. PAYNE, M.D.
 Panel Director.

WARTIME PUBLIC HEALTH CONFERENCE

The Second Wartime Public Health Conference, emphasizing "Tools From The War" was held in the Hotel Pennsylvania, New York City, October 2, 3, 4, and 5.

LAUNDRY PROCESS UTILIZING SEA-WATER DEVELOPED

A process which makes use of sea water for laundry purposes has been developed, and will soon be in use on all Army hospital ships. In initial experiments the United States Army hospital ship *Wisteria*, was selected for a practical test at sea, and in a thirty-day period 36,101 pieces were successfully laundered with sea water. This meant a saving of about two-thirds the linen inventory carried by hospital ships, or room for four more bed patients or ten more walking cases on each ship. The saving effected in fresh water was 4,480 gallons a day, and the reduction in amount of linen used represented a considerable financial saving. The process can be installed in any ship's laundry by cutting in the salt water pipe. Its use on troopships and island bases is also contemplated.

PROMOTION OF NURSE EDUCATION

District offices of the Division of Nurse Education, U. S. Public Health Service, are being opened in seven districts throughout the country, according to Dr. Thomas Parran, Surgeon General, U. S. Public Health Service.

The following offices have been opened:

District 1, 119 West 57th Street, New York City 19, New York, Miss Mary O. Jenney, Nurse Education Consultant in charge. Territory includes: Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New York, New Jersey, Pennsylvania, Rhode Island and Vermont.

District 3, City Hall Square Building, 139 North Clark Street, Chicago 1, Illinois, Miss Jane E. Taylor, Nurse Education Consultant in charge. Territory includes: Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin.

District 4, 1307 Pere Marquette Building, 150 Baronne Street, New Orleans 13, Louisiana, Miss Elsie T. Berdan, Nurse Education Consultant in charge. Territory includes: Alabama, Florida, Georgia, Louisiana, Mississippi, New Mexico, South Carolina, Texas and Tennessee.

District 5, New Appraiser's Building, Room 1402, San Francisco 11, California, Miss Lyndon McCarroll, Nurse Education Consultant in charge. Territory includes: Arizona, California, Nevada, Oregon and Washington.

Washington, D. C.: Miss Marie Farrell, Nurse Education Consultant in charge. Territory includes: District of Columbia, Maryland, North Carolina, Virginia and West Virginia.

Offices also will be opened soon in—

Kansas City, Missouri—territory includes: Arkansas, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota.

Denver, Colorado—territory includes: Colorado, Idaho, Montana, Utah, Wyoming.

CONVALESCENT TROOPS FOLLOW
PROGRESS OF WAR IN FILMS

Convalescent troops are now able to follow the progress of the war by means of "Restricted Staff Film Reports" prepared by Army Pictorial Service of the Signal Corps, Army Service Forces, and distributed to all of the 60 general military hospitals in the continental United States, the War Department announced.

These photographic "reports" are official versions, not available to the public, of combat photography released after review by the Office of The Surgeon General of the Army.

The films are factual and objective, presenting surveys of military operations on all fronts, with explanatory remarks but with no editorial comment of any kind. Every effort is made to keep them up to the minute. Individual films vary in length from 15 to 30 minutes, depending upon the amount of footage flown back each week from different war theaters and the importance of the pictures themselves.

By an extension of the plan bed-ridden soldiers on U. S. Army hospital ships returning from the different war theaters to the United States also see combat films (From Army Addenda).

ADOPTION AND FERTILITY

Although statistical studies are not available comparing the incidence of pregnancy among previously sterile women who adopt children with the incidence among those who do not, if they were available they probably would show that the incidence is the same in the two groups. *The Journal of the American Medical Association* for October 7 says in answer to a query. If a woman, sterile for some years, adopts an infant and subsequently becomes pregnant, it strikes every one as a startling event and is long remembered. On the other hand, if the same woman had not adopted an infant and had become pregnant, the occurrence would be much less dramatic and few people would pay much attention to it.

"COURAGE AND DEVOTION BEYOND THE
CALL OF DUTY"

Through the cooperation of Mead Johnson & Company, \$40,000 in War Bonds are being offered to physician-artists (both in civilian and in military service) for art works best illustrating the above title.

For full details, write Dr. F. H. Redewill, Secretary, Flood Building, San Francisco.

ESTABLISHMENT OF UNIVERSITY OF
GEORGIA SCHOOL OF NURSING

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Nursing and as State director of nursing education in Nebraska. She came to Georgia from the University of Utah where she was professor and director of nursing education.

Miss Kandel is vice-president of the National League of Nursing Education, and is a member of the Business and Professional Women's Club, American Association of University Women, and Delta Kappa Gamma.

MEDICAL OFFICERS NEEDED

The Civil Service Commission has announced a new examination for Rotating Internship and Psychiatric Resident positions at St. Elizabeths Hospital, the Federal institution for the treatment of mental disorders, in Washington, D. C. The positions pay \$2,433 a year, including overtime pay.

The internship consists of 9 months of rotating service including medicine, surgery, pediatrics (affiliation), obstetrics (affiliation), and as conditions permit, psychiatry and laboratory. Applicants must be third- or fourth-year students in an approved medical school.

Psychiatric resident positions consist of 9 months in psychiatry. Applicants must have successfully completed their fourth year of study in a medical school and they must have had the degree of B.M. or M.D. In addition they must have completed an accredited rotating internship of at least 9 months or be serving such internship at the time of making application. Persons who attain eligibility but who are still serving their internship may have their names submitted for appointment but they cannot enter on duty until they have completed their internship.

There are no age limits for this examination and no written test will be given. Applications will be accepted until the needs of the service has been met. Application forms may be secured at first- and second-class post offices, from the Commission's regional offices, or direct from the U. S. Civil Service Commission, Washington 25, D. C.

Appointments to Federal positions are made in accordance with War Manpower Commission policies and employment stabilization programs.

FACTS ABOUT NURSING, 1944

Facts About Nursing, 1944, a practical handbook of essential data about nursing, points up the growth of hospital, health and nursing services as well as of nursing schools in recent years and suggests trends of special interest to those concerned with post-war planning.

According to the 1944 facts, approximately 208,000 registered nurses are serving civilians in this country. Another 48,000 are in military service; of these nearly 23,000 are overseas. Departments of the Federal Government, exclusive of the Army and Navy, employed over 6,500 nurses in 1943, and the employment of over 7,500 has been authorized for the current fiscal year.

Excerpts from the population reports of the U. S. Census point up sharply the shifts in population, especially to the West Coast where it increased by 20 per cent between April 1, 1940, and July 1, 1943; and the changes in population, state by state, during that same period.

Statistics about infant and maternal mortality are presented state by state. Leading causes of death, and the number of cases of 9 preventable communicable diseases, are also listed.

Information included about shortages of personnel in schools of nursing are significant especially in relation to the all-time high student enrollments—112,000 as of January 1, 1944, compared to 91,000 on January 1, 1942. Sources from which all statistics are obtained are clearly indicated, and the materials are carefully indexed.

The price of the 1944 booklet is 25 cents. Copies may be ordered from the Nursing Information Bureau of the American Nurses' Association, 1790 Broadway, New York 19, New York.

GOOD HEALTH OF TROOPS IN THE UNITED STATES

Admissions to military hospitals from troops stationed in the U. S. show that these soldiers are much healthier than were the troops stationed here during the last war. During the mobilization period, as might be expected in so large an army, admissions for disease increased somewhat over the peacetime rate. However, this rate is now dropping to peacetime level and rates of admission for respiratory and all important communicable diseases are far lower than in 1917-1919.

The death rate shows an even more marked improvement. It is not only lower than World War I, but is lower than the rate for the intervening peace years. This is probably due largely to the following factors: (a) reduced incidence of several communicable diseases which contribute appreciably to the mortality rate, (b) improved methods of treatment, most important being the introduction of chemotherapeutic agents, and (c) lowered average age of troops.

Among the communicable diseases figuring prominently in the present war are:

Meningococcal meningitis: As in the civilian population, this disease reached a prevalence several times higher than the normal inter-epidemic level in 1943; however, its prevalence has been somewhat lower than in the last war and its mortality, thanks to the sulfonamides, has been only a small fraction of that in the last war (case fatality rate 4.5 per cent in 1943 as against 34.3 per cent in 1917-1919).

Primary atypical pneumonia: Comparison with previous periods is impossible as this disease has only recently been recognized clinically. There is evidence that more of the pneumonias now occurring are primary atypical than of known bacterial cause. The case fatality rate has been very low. The disease has had a seasonal distribution similar to that of the common respiratory diseases.

Diarrheal diseases: This group of diseases of diverse causes, but having a common basis in deficiencies of sanitation, has shown a considerable increase from peacetime owing to the much greater number of troops on maneuvers, especially during the summer months, with the added problems of field sanitation. Case fatality is very low. The present trend of rates is downward.

With respect to other communicable diseases too, the record has been excellent. Measles, mumps, and scarlet fever are reduced greatly, while diseases against which immunizing methods are practiced (typhoid, smallpox, tetanus) have all but disappeared.

NEWS ITEMS

Lt. Col. Daniel C. Elkin, chief surgeon at Emory University Hospital and the Emory division of Grady Hospital from 1923 to 1942, was promoted to the rank of Colonel August 29. At present he is serving with the Medical Corps at Ashford General Hospital, White Sulphur Springs, West Virginia.

Dr. Thomas Parran, surgeon general of the United States Public Health Service, was the principal speaker at a luncheon at the Hotel DeSoto given in his honor by the City of Savannah. Discussing medical strides in the control of malaria, tuberculosis, and venereal disease he said continued effort might make possible eradication of the three. Dr. T. F. Abercrombie, director of public health for Georgia, went down from Atlanta to be with Dr. Parran and visit the Carter Memorial Laboratory, the Southeastern Medical Center, the Georgia Infirmary, and the United States Marine Hospital.

Six Augustans were among the sixty graduates of the University of Georgia School of Medicine who received diplomas September 11. They are: Alfred Mann Battey, Jr., William Arthur Matthews, Warren Spence McClelland, Joseph Louis Mulherin, William Thearle Steele, and William Otis White.

Dr. Thomas W. Collier moved his offices into the building he recently purchased at 706 Gloucester Street, Brunswick, Georgia.

Dr. Roger W. Dickson has recently been made Professor of Pediatrics and Chairman of the Department of Pediatrics in the School of Medicine of Emory University and Chief of the Pediatric Service in Grady Memorial (Municipal) Hospital, Atlanta.

Dr. Alton Ochsner, professor of surgery and head of department of surgery, Tulane University, and director of the Ochsner Clinic, New Orleans, Louisiana, spoke before the Fulton County Medical Society at the October meeting on "Bronchiogenic Carcinoma" illustrated with lantern slides and moving pictures. Dr. Ochsner spoke at the anniversary meeting of the Sheffield Clinic at the Georgia Baptist Hospital October 6.

Dr. Ben H. Clifton, Atlanta, president of the Fulton County Medical Society, wrote the President's Message —

"Good Citizenship" which was published in the October issue of the Bulletin of the Fulton County Medical Society. Titles of other articles are: "Clinical Aspect of Virus and Pneumococcal Pneumonia"; "X-Ray Findings in the Pneumonias"; "Treatment of Pneumonia"; "Surgical Treatment of Empyema"; "Treatment of Empyema with Penicillin"; "Nurses Are Needed!"; "Attention, Doctors!"; "The Blood Type Registry Closes" and "News Items."

Members of the Bibb County Medical Society were guests at a dinner meeting at the Mercy Hospital October 3.

The Fulton County Medical Society will feature "Clinic Day" on November 2, at Grady Hospital, Atlanta, from 9:00 A.M. to 5:00 P.M. Dinner will be served at the Academy of Medicine at 6:30. A guest speaker will address the Society and visitors at 7:30. A hearty welcome awaits you to be present at the clinics, enjoy dinner, and hear the guest speaker.

OBITUARY

Dr. Rance O'Neal, prominent physician of Troup County, died Sept. 11, 1944. He was seventy years of age and a graduate of Atlanta College of Physicians and Surgeons of Atlanta in 1901. Dr. O'Neal was a native of Harris county and began practice of medicine in West Point. His practice carried him into Troup and Harris counties, and into Chambers County, Alabama. Dr. O'Neal was a member of the Medical Association of Georgia and the First Methodist Church. Surviving him are two children, William O'Neal, of Gainesville, and Mrs. Candler Harwell, of West Point. Burial was in the West Point Cemetery.

Dr. J. M. Hooten, retired physician of Woodbury, died Sept. 12, 1944. He was eighty-three years of age and a graduate of Emory University School of Medicine in 1885. He was a member of the Medical Association of Georgia and practiced medicine in Meriwether County for more than fifty-seven years. Surviving him are his wife, two daughters, Mrs. James Kirkpatrick, Columbus, and Mrs. Elmo Smith, Atlanta; one son, Ralph Hooten, Woodbury. Funeral services were held from the residence at Woodbury, with interment in the city cemetery.

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THE JOURNAL

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MEMORIAL ADDRESS

A. J. MOONEY, M.D.
Statesboro

It is fitting indeed that at the time of our annual meeting, in the midst of our splendid scientific program, our thoughts should turn to those of our confreres who a short year ago were in our midst, but have now gone on that long journey to that undiscovered country from whose bourne no traveler ever returns.

In aeons long past, when nature was primitive in man, when the survival of the fittest was the prevailing urge the Great Creator began the evolution of the larger plan.

In order to develop the state of dependency so necessary to the formation of society coincident with the ambition and aspiration of man; to bring incentive for the great principles of humanitarianism — of charity, aid, healing and comfort — and through the shortcomings of man himself, there came affliction of mind, body and soul.

To meet such an occasion the physician came forth — the embodiment of all the characteristics of the love and hope of humanity — a title that was canonized by the Great Redeemer over nineteen hundred years ago.

The physician himself need have ideal qualifications for the labor of love and duty that lie before him; he must be strong with the weak; patient and poised; he must be counselor and comforter, and bring hope as he heals. On occasions when human shortcomings are poured into his ears from the sacred depths of the human heart. he must be a sympathetic confessor and advisor and withal hold science and practice

as his guiding star; he must accept defeat gracefully, be not discouraged, ever ready for renewed battles. He must learn to stand in the presence of death unawed and be prepared to meet it with a smile when it comes to him.

In his fellowman he must inculcate the philosophy of life with its varied emotions all tending to one common end in the greater plan that sorrows are necessary to make the joys sweeter; shadows to make the sunshine brighter; and disappointment to develop resistance and stamina.

With hearts full of memories of the too brief period of time they were in our midst, listen to their last roll call on this earth:

Akerman, Joseph, Augusta, December 5, 1943, aged 71.
Akin, Benjamin F., Jackson, June 12, 1943, aged 74.
Askew, Hulett Hall, Atlanta, February 20, 1944, aged 50.
Barker, Novatus Lee, West Point, January 19, 1944, aged 79.
Bivings, William Troy, Jr., Atlanta, June 15, 1943, aged 36.
Blanchard, Pierce Gordon, Appling, October 11, 1943, aged 55.
Davidson, Albert Alonzo, Augusta, March 19, 1944, aged 71.
Deaver, Emory S., Monroe, August 25, 1943, aged 65.
Dorminy, Edward J., Fitzgerald, Jan. 14, 1944, aged 76.
Duckett, Pierce Young, Cornelia, November 18, 1943, aged 81.
Dunn, William Milas, Atlanta, January 4, 1944, aged 62.
Eberhardt, Benjamin F., Gillsville, February 21, 1944, aged 75.
Elkin, William Simpson, Atlanta, April 24, 1944, aged 86.
Emery, Walter Branham, Atlanta, September 8, 1943, aged 67.
Fishburne, Charles Carroll, Darien, February 3, 1944, aged 59.
Funderburk, Nicholas Amon, Trion, October 30, 1943, aged 49.
Gordon, Alexander J., Jesup, June 8, 1943, aged 81.
Grier, Rufus Lynn, Lumpkin, December 11, 1943, aged 77.
Hammond, James Tyler, Atlanta, November 2, 1943, aged 87.
Harvard, Virgil O., Arabi, June 26, 1943, aged 69.
Hill, Roy Albert, Thomasville, January 1, 1944, aged 55.
Holden, Alexander Stephens, Ellijay, April 15, 1944, aged 78.

Hurt, John Sutherland, Atlanta, November 26, 1943, aged 66.
 Johnston, Zebulon Vance, Calhoun, March 13, 1944, aged 61.
 Jones, John Paul, Savannah, April 10, 1944, aged 56.
 Kelly, George Washington, Carlton, October 2, 1943, aged 53.
 Kennedy, Wiley Calvin, Talmo, May 27, 1943, aged 71.
 Klugh, George Fred, Jr., Atlanta, March 15, 1944, aged 37.
 Lamb, Erford Haskell, Cornelia, April 23, 1943, aged 66.
 Longino, Lovick Pierce, Milledgeville, November 20, 1943, aged 64.
 McArthur, Charles Holder, Rome, Aug. 2, 1943, aged 48.
 McCrummen, Leon R., LaGrange, January 15, 1944, aged 63.
 McLarty, Marvin Wilson, Atlanta, April 27, 1943, aged 65.
 Miller, George Twiggs, Macon, March 17, 1944, aged 91.
 Rainey, Charles Oliver, Camilla, May 14, 1943, aged 60.
 Reid, John F., Buchanan, April 3, 1944, aged 76.
 Robinson, Lisle Benjamin, Atlanta, November 18, 1943, aged 55.
 Rogers, Holbert Asbury, Jeffersonville, August 8, 1943, aged 59.
 Rushing, William Everett, Millhaven, May 5, 1944, aged 68.
 Saye, Josiah P., Ball Ground, May 21, 1943, aged 83.
 Sibbett, William Albert, Douglas, December 7, 1943, aged 58.
 Slack, Henry Richard, LaGrange, Jan. 16, 1944, aged 81.
 Smith, George Leon, Swainsboro, Jan. 4, 1944, aged 83.
 Smith, Simon Harris, Atlanta, June 3, 1943, aged 41.
 Smith, Louis, Lakeland, April 29, 1944, aged 66.
 Spearman, Guy Fleming, Atlanta, March 8, 1944, aged 63.
 Stewart, Thomas Hill, Jr., Eastman, January 7, 1944, aged 51.
 Tessier, Louie P., Augusta, November 22, 1943, aged 71.
 Thomas, Marion Russell, Savannah, April 8, 1944, aged 66.
 Trimble, George C., East Point, April 9, 1944, aged 80.
 Upshaw, Harry Lee, Social Circle, April 6, 1944, aged 51.
 Wall, John Cox, Eastman, May 18, 1943, aged 61.
 Watkins, Richard S., Columbus, January 29, 1944, aged 85.
 Wise, Samuel P., Plains, November 3, 1943, aged 59.

Their years average 67 and 3 months.

Think of the years of service and the glorious opportunity that came to each of them for fulfilling the ideals of the physician.

When I come to the combined years of their lives I am moved by the same emotion I once experienced while I stood in the presence of antiquity in Field's Museum in one of our great cities — I felt humble as if I stood on holy ground.

The sum of the years they lived is the amazing amount of 3,626.

Think of such an aggregate and let us with reverence apply their 3,626 years to

events in the long long past: the oldest living thing then on earth — the giant Sequoia tree was a mere sapling.

The Pharaohs and Cheops were just building some of the Pyramids of Egypt; the Sphinx had been just completed.

England was yet to fall to William the Conqueror. Sicily had just been invaded and conquered.

Isaac was a newborn babe to Abraham and his 90 year old wife, Sarah. Jacob and Esau were yet to come into activity; Jacob was yet to woo Rachel at the well.

Hundreds of years must pass before the babe Moses would be rescued from the ark of the bullrushes; before he could bring the tablet of stone with the ten commandments there on down from the heights of Mt. Sinai; before he should view the land of Canaan and rest in an unmarked grave in the land of Moab.

It was still in the distant future before Joshua would command the sun to stand still while he won the glorious victory.

The beautiful event of love between Ruth, the Moabitish widow, her mother-in-law, Naomi, and the farmer, Boaz, the beginning of the ancestral line of the Great Redeemer — the Great Physician — was yet to take place.

Hundreds of years must pass before David was to begin his reign; before he was to fight his battles, show his human weaknesses; must be reprimanded by the accusing finger of Nathan; must mourn the loss of Absalom; must suffer agonies of woe over the loss of his son by Uriah's wife; must write his Psalms of joy, sadness, and repentance, then pass into history as a man after God's own heart.

Fifteen hundred years must pass before the birth of the Great Redeemer; before Gethsemane; before Calvary and the crucifixion; and His glorious ascension and His promise to return.

Saul was yet to travel the Damascus road; Paul was yet to struggle and undergo hardships for the fine religious freedom we enjoy today.

The deeds of Hernando DeSoto; Christopher Columbus in discovering our own country are far too recent to include. Compared

to the past of their years lived, Washington at Valley Forge is but as yesterday.

And now a last farewell. I do not believe they feared death. They had stood in its presence too often.

In Gibron's book "The Prophet," Alimetra spoke saying "We would ask of death."

Almastapha replied: "You would know the secret of death. How shall you find it unless you seek it in the heart of life? If you would indeed behold the spirit of death, open your heart wide unto the body of life; for life and death are one even as the river and the sea are one. For what is it to die but to stand naked in the wind and melt into the sun? And what is it to cease breathing but to free the breath from its restless tides, that it may rise and expand and seek God's unencumbered?"

Would that they could have stayed a little longer on earth to have witnessed the summation of their fondest hopes for the return of loved ones now on foreign soil, and for victory.

Simeon of old was promised by God that he should not die until he had beheld the Saviour.

When the babe of Bethlehem was placed in his loving old arms he said: "Lord now lettest Thy servant depart in peace according to Thy word; for mine eyes have seen Thy salvation."

Would that those to whom today we pay our humble tribute could have witnessed the salvation of their own beloved country.

Their bodies rest beneath the soil of the State they loved so well, there to remain in the arms of the great common mother until the dawn of the day of resurrection.

Fades the day
And afar goeth day, cometh night
And a star shall keep watch
While they sleep.

PENTOTHAL SODIUM ANESTHESIA

R. L. KENNEDY, M.D.

Metter

The intravenous route for administration of an anesthetic agent has appealed to the medical profession for many years, as is

From the Kennedy Clinic, Metter.

attested by the history of attempts and trials of the method dating back to 1870. Successful and extended application of the method had to await the introduction of the ultra-short acting barbiturates and the development of the intermittent method of administration. We have been interested in this method of anesthesia for some time. During the past three years we have employed the intermittent intravenous administration of pentothal sodium for anesthesia in more than 4,000 operations. These operations have consisted of both minor and major procedures and the period of anesthesia has varied from five minutes to two and one-half hours. No deaths attributable to the anesthetic agent have occurred in this series.

A 2.5 per cent solution of pentothal sodium is used. This solution is prepared by dissolving 1 Gm. of the drug in 40 cc. of sterile distilled water. This 2.5 per cent solution is preferred because it allows easier and better control of dosage with less possibility of the anesthetist giving an overdose inadvertently. Further, as has been reported, the incidence of irritation of the intima of the vein and subsequent phlebothrombosis is not encountered as is occasionally seen following the use of 5 or 10 per cent solutions.

Preoperative sedation is generally recommended and used prior to intravenous pentothal sodium anesthesia. It is our usual practice to administer one 11½ gr. nembutal capsule at bed time on the night preceding the operation. This assures the patient a night of restful sleep and in the event the patient reacts unusually to barbiturates, as a class, this medication will forwarn both the anesthetist and surgeon. The dose of nembutal is repeated on the morning of the operation one or two hours prior to the scheduled time of operation. One-half to one hour before transfer to the operating room a hypodermic injection is given of a solution containing morphine sulfate gr. 1/8 to 1/4, atropine sulfate gr. 1/150 and strychnine sulfate gr. 1/60. The use of this medication allays preoperative apprehension, affords amnesia, allows easier induction of anesthesia and reduces the amount of the

anesthetic agent needed for induction and maintenance of anesthesia. In certain cases or conditions, particularly emergency surgical procedures, the barbiturate, morphine and strychnine may be omitted; however, atropine should always be given before any intravenous barbiturate anesthetic. In emergency cases it should be given intravenously if absorption cannot be assured prior to induction from hypodermic injection. The intravenous barbiturates exert a parasympathetic stimulating effect which may be manifested by coughing, hiccough or laryngeal spasm. Atropine given preoperatively has been shown to counteract this stimulating action of these drugs and to prevent the occurrence of these undesired effects. As with other anesthetic methods and agents one should make certain that the patient's stomach is empty, and that there are no foreign bodies in the mouth before induction of anesthesia.

Induction

Administration of the anesthetic is not started until the operative field has been prepared, the patient draped and the surgical team ready. The rapid and smooth induction of anesthesia with pentothal sodium allows this delay which is justified by the shortened total period of anesthesia.

At this point it is important to stress the frequently reported, but often forgotten, fact that individuals vary in their susceptibility to barbiturates, particularly when given intravenously, and that the dosage of pentothal sodium must be adjusted in accordance with the effects produced in each patient. Induction and maintenance of anesthesia are accomplished by administering intermittently small fractional doses of the drug.

The dose of pentothal sodium cannot be computed on a milligram per kilogram of body weight basis. Experience and training are the essential factors in determining the size dose and rate of administration of this drug. Slowness in the administration of pentothal sodium cannot be overemphasized. Pentothal sodium is administered just sufficiently rapidly to obtain anesthesia, but more important, sufficiently slowly so that respiration is not depressed. It must be con-

tinually borne in mind that, due to the rapid onset of action and rapid rate of absorption of pentothal sodium, all signs are subject to rapid change.

It is helpful to have the patient count slowly or talk during the induction period. When the patient has been instructed, 2 cc. of the 2.5 per cent pentothal sodium solution are injected intravenously in 10 to 15 seconds. The injection is then stopped for about 30 seconds to observe the reaction of the patient to the drug and dose given. In accordance with the patient's reactions, 4 to 6 cc. are then injected slowly. Anesthesia usually occurs within 30 seconds after administration of this dose. When speech becomes blurred and the patient begins to lose consciousness, the injection is stopped and no more solution is injected until signs of lightening anesthesia indicate the need of a supplemental dose.

While the doses mentioned above will induce anesthesia in the average adult, unusual responses are not infrequently observed. Younger individuals usually require larger doses, especially those between 18 and 30 years of age, and the short, square, heavily muscled individual requires larger doses. Occasional patients are encountered who require up to 1 gram of the drug, 40 cc. of the 2.5 per cent solution for induction. Poor risk patients, elderly individuals and particularly patients showing any evidence of shock may lose consciousness when as little as 2 cc. of the 2.5 per cent solution have been administered.

As soon as the patient is relaxed an airway is inserted and administration of oxygen through a nasal catheter, at the rate of 4 to 5 liters per minute, is started. Oxygen is used in all but very short operations, that is those under 10 minutes. The patient's jaw must be supported at all times and any other measures adopted that are necessary to maintain an adequate airway. The use of oxygen as a supplement to pentothal sodium anesthesia successfully combats the tendency to lowered oxygenation of the blood resulting from depression of the respiratory center. This is of particular importance when pentothal sodium is used for major or prolonged procedures requiring second or third plane surgical anes-

thesia. In addition to maintaining the color of the patient the use of oxygen improves muscular relaxation and, in our opinion, lessens the total dose of pentothal sodium that might be used in any individual case.

The depth of anesthesia is judged by observing both the respiratory rate and excursion and the degree of muscular relaxation. Here again experience is an essential factor. In light anesthesia the respirations are deep and only slightly depressed in rate. When anesthesia is deep respiration is shallow and markedly slowed. Muscular relaxation can usually be readily determined by the degree of relaxation of the muscles of the jaw.

After induction the needle is left in place in the vein and anesthesia is maintained and extended by administering additional small doses intermittently. The indications for further injection are evidence of light anesthesia. This is determined by the respiratory rate and excursion, the degree of muscular relaxation or, in an occasional patient, the first signs of lightening anesthesia may be slight movement of one of the extremities, phonation or reflex movements due to painful stimulation. Only when evidence of light anesthesia is present are supplemental doses given. The usual required dose is 1 to 3 cc. of the 2.5 per cent solution. This should be administered slowly with continuous observation of the patient. In properly conducted anesthesia these small supplemental doses should be necessary every two or three minutes. If the effects of supplemental doses last beyond three or at least five minutes it suggests possible overdosage. As the duration of anesthesia lengthens, the size of these supplemental doses needed progressively diminishes. May we emphasize again that all doses should be administered slowly, that dosage should be to the desired effect and that particular care should be taken that overdosage with resulting respiratory depression does not occur.

The administration of pentothal sodium is discontinued in the terminal stages of the operation; for example, in intra-abdominal surgery none is given after the surgeon starts closing the incision.

Recovery usually occurs within a few minutes to the extent that the patient can be aroused sufficiently to answer questions. This usually occurs in five to thirty minutes, depending on the total dose of pentothal sodium administered. Following this there is a period of sleep of from one to two hours, rarely longer, from which the patient may be awakened as from a natural sleep. It is our policy to leave the airway in place until the patient regains complete consciousness. Mental excitement, restlessness, and incoordinated muscular movement are rarely seen following this anesthesia. Nausea and vomiting, headache, and excessive perspiration are infrequently encountered during recovery from pentothal sodium anesthesia. It is desirable and recommended that a nurse, or some dependable and capable individual, remain with and constantly observe the patient until consciousness is regained to make certain that the airway is not obstructed and is adequate.

In addition to using pentothal sodium or pentothal sodium-oxygen as the sole anesthetic for minor and major surgery we have used pentothal sodium for induction of anesthesia to be maintained by ether and have found light pentothal sodium anesthesia a valuable supplement and complement to spinal anesthesia. We have also employed pentothal sodium administered rectally for basal anesthesia in children with excellent results, but the number is so limited that we still consider it in the investigative stage and at the present time are unwilling to express a final opinion regarding its eventual merits.

In prolonged operations we find it advantageous to start a slow continuous intravenous infusion of glucose or isotonic sodium chloride solution at the start of the operation. Pentothal sodium is administered with the infusion fluid by injecting the solution into the lumen of the delivery tubing just above the needle adapter or by injecting it through the needle by means of a three-way stopcock control between the needle and the adapter of the infusion delivery tubing.

The average dose of the pentothal sodium, when used for anesthesia for intra-abdomi-

nal surgery, is 1 to 2 Gm. for procedures lasting 30 to 45 minutes. We have used as much as 4 Gm. in a simple appendectomy on a robust young man and as little as 0.75 Gm. on a frail woman for hysterectomy. Our longest procedure under this anesthesia was an abdomino-perineal resection for carcinoma of the rectum. The total dose in this case was 2.5 Gm.

The danger signs of pentothal sodium anesthesia, as observed in our clinic, are as follows:

1. Cyanosis. This as a rule is usually due to too rapid injection and consequent over-dose. As stated above, it is always important to use oxygen throughout the operation.

2. Sudden dropping of blood pressure. This has occurred in very, very few instances. There is usually a slight drop in blood pressure, due directly to pentothal sodium, of 5 to 10 points. Pulse rate is only slightly accelerated.

3. Moist warm skin.

4. Rapid weak pulse.

5. Absence of pupil reflex with a beginning dilation.

6. During a long operation should the blood become dark it is best that the surgeon notify the anesthetist at once.

Contraindications

1. Acute or sub-acute infections of the lungs or upper respiratory tract, particularly should this be observed during epidemics of influenza.

A. Nose and throat operations we consider a contraindication, especially tonsillectomies. However, we have performed quite a number in our clinic with this anesthetic. Speed is a factor here, as well as hemostasis.

B. We would also consider lung abscess, empyema and foreign bodies in the trachea or bronchi as contraindications.

2. Those who have an idiosyncrasy to barbiturates (as a rule this can be determined by observing the patient on the night previous to the operation as we generally employ it in our elective cases).

3. Alcoholics.

4. Intestinal obstruction — particularly so if vomiting is present.

5. Moderate or marked secondary anemia.

6. Cesarean sections. We have not noted any deleterious effect on the mother, though we have in the infant. They have a tendency to sleep from 12 to 18 hours. We have employed it in only 10 cesareans, and in these cases only small amounts were given.

7. In children under 10 years of age it should be given with extreme caution.

In conclusion, I wish to say that with a competent anesthetist I consider pentothal sodium as safe an anesthetic agent as can be used.

LONG, EVE AND DUGAS

The Ether Controversy

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Few controversies in medical history have been accorded the attention given that of anesthesia. Except for an occasional dissenter, the medical profession now credits Crawford W. Long with the first use of ether in the performance of a surgical operation. Long has shown by sworn testimony (July 23, 1849) presented to the Medical Association of Georgia in 1849, that he removed a tumor from the neck of J. M. Venable on March 30, 1842; that he amputated the toe of a Negro boy on July 3, 1842; that he removed a tumor from the head of a woman on September 9, 1843, and that he amputated the finger of a Negro boy January 8, 1845.

His contentions have been supported by the testimony of several of the medical students under his preceptorship; namely, John F. Groves (graduated from Medical College of Georgia in 1849) and P. A. Wilhite. That he did not keep his discovery secret is supported by the evidence of Dr. W. W. Carlton, of Athens, Georgia, who was induced to give ether to his wife while he extracted her aching tooth.

That his reputation had spread to some distance is shown by the fact that he was in 1848 called to Augusta by Dr. Paul F. Eve to address the medical students at the

Medical College of Georgia, a fact established by the testimony of Dr. Massey who was then in residence and who made the matter a subject for his graduation thesis in 1850. *This fact I have been able to confirm by reference to the minutes of the Board of Trustees of the Medical College.*

In the biography of her father, Mrs. Frances Long Harper further states that Bill Arp heard Joseph LeConte of the faculty of the University of Georgia in Athens, lecture on Long's discovery in 1845.

Why, then, should there have arisen such a controversy about priority in the matter of the use of ether?

To one acquainted with the medical history of Georgia during this period, Dr. Long's dereliction in delaying publication of his findings is not difficult to understand. Jefferson, the town in which Long practiced, was at the time and still is a small country town. It is twenty-eight miles from Athens, the site of the University of Georgia. There were no local medical associations in Georgia at the time except the Georgia Medical Society at Savannah, the Medical Society of Augusta, and the Central Medical Society of Milledgeville. Their chief concerns at the time were to support the Medical College at Augusta, to control licensure of candidates for practice in the State, and to effect the organization of a nationwide medical association for the purpose of combatting the quackery of the Thompsonian and nature doctors. In spite of the fact that there were 1,297 doctors in Georgia the membership in the societies was very limited. Long was not a member of any of these societies (S. M. & S. J. Vol. 188, 1849).

Long, at the time of his discovery, was only twenty-nine years of age. He had recently returned from his medical training in the North where he had spent a year at Transylvania, a year at Pennsylvania and a year in New York. Furthermore, ether and laughing gas were being exploited by itinerant chemists who put on shows or "frolics" for the amusement of the public. Ether seems to have been on every pharmacist's shelf. Its serious use in medicine was only for "drops." *I have two records of its use in this manner in the practice of Dr. W. B.*

Freeman at Carnesville, Georgia, in 1824.

In spite of his success in the use of ether as an anesthetic in surgical operation, one can readily understand Long's hesitancy in sending an account of his findings to his famous instructors in Philadelphia, or his preceptor, Dr. Grant, at Memphis.

A local journal was not available to Long at the time. The Southern Medical and Surgical Journal was founded by Milton Antony at Augusta, Georgia. Antony died in the yellow fever epidemic of 1839 and the journal was discontinued until Eve had assumed the editorship in 1845. Augusta is about one hundred and thirty miles from Jefferson and is more than a good day's journey by horse. There is no evidence that Long had met Eve before 1848.

It is interesting to follow the ether-chloroform controversy during the period 1849 to 1853 as presented by the data in this journal. The first publication on ether appears in the 1847 volume. As editor, Eve had a wide acquaintance with the leading physicians in the United States. He frequently copied articles verbatim from the Northern journals in his section, the Monthly Periscope. He reprinted Bigelow's article from the Boston Medical and Surgical Journal, 1846, concerning the use of Morton's "Letheon." (S. M. & S. J., 3: 29, 1847).

In 1847 he printed another letter in which Morton asks that his apparatus and agent be tried out in the public clinics and in which Morton offers to license the local hospital for one hundred dollars for five years. He printed Jackson's letter in toto in which the letter states how Morton had stolen the idea (S. M. & S. J. 3: 226, 1847).

He printed a letter from Joseph LeConte, professor of chemistry at Athens, giving the method of preparation of ether. Oddly enough neither the comments of LeConte, nor Professor Means of the Medical College include a statement concerning Long (S. M. & S. J. 3: 252, 1847).

Eve does not seem to have become seriously interested in anesthesia until 1848 corresponding with the visit of Long, since in 1848 he reports thirteen cases of complicated labor without mentioning either ether or chloroform. In 1848, however, he

publishes a letter from his correspondent in Paris; namely, O. P. G., dated Nov. 30, 1847, stating that two hundred and eleven operations have now successfully been performed in Paris under chloroform anesthesia introduced by Simpson in obstetrics and reported Nov. 10, 1847 (S. M. & S. J. 4: 108, 1848). The correspondent discusses the Grande Nation priority claims and the work of the great Velpeau and Flourens. The Augusta profession as well as that of the State-at-large was markedly influenced by the authority of Paris, although Eve states that it was Professor McKensie who informed him of chloroform in December, 1847 (S. M. & S. J. 5: 279).

Eve's first operation under anesthesia (chloroform) was done March 2, 1848. He states that he gives the date because he thinks it was the first case in which chloroform was used as a surgical anesthetic in the United States (S. M. & S. J. 5: 278). Simpson's technic was much more simple than that of Morton. No special apparatus was needed, but Eve states that he believes the use of a "bladder" is economical and that he preferred it (Footnote p. 125-Feb. 1848). It would seem from this that he may have purchased one of the licensed apparatus offered him by Morton. He reviewed Simpson's paper on "The Discovery of a New Anaesthetic Agent More Efficient than Sulphuric Ether" (S. M. & S. J. 108, 1848), and in 1849 reviewed Simpson's book. (S. M. & S. J. 5:401).

In 1849 Eve published a table of sixty-four operations performed by himself, six under ether, fifty-eight under chloroform. (S. M. & S. J. 5: 278). He also refers to six other articles from the literature on chloroform, including that of Baudeloque.

In this same year he published Long's first account of the use of ether (S. M. & S. J. 5: 705) and accepted his affidavits as conclusive proof of priority. As a precautionary footnote, however, he says that "our friend Dr. Long can lay no claim to the introduction of sulphuric ether as an exhilarating agent when its vapors are inhaled" (S. M. & S. J. 5: 712). This is an historical oddity since it has no direct bearing upon the anes-

thetic problem, but it must have been uppermost in the mind of Eve since he publishes an account of the death of a medical student, D. W. Jacobs, who had taken an overdose of ether in a "frolic" (S. M. & S. J. 5: 342 1848).

That he was definitely prejudiced against ether is borne out further by an account of a fatal case from the practice of Drs. Bassett and Fearn who gave ether to a Negro with tetanus on Aug. 15, 1847 (S. M. & S. J. 5: 343).

He follows Long's article by the report of Erskine and Sheffey from Hartsville, Alabama, in the successful use of chloroform in surgical operations (S. M. & S. J. 5: 713). In Eve's case history reports of operations performed before the medical students in their first day's clinic in 1848 (published in S. M. & S. J., January, 1849; 429), he used chloroform in the removal of an enlarged axillary gland and in catheterization of the urethra. He removed a congenital tumor from the hand of a four months old child without anesthetic. On the 6th of January, 1849, he performed a lithotomy under chloroform (S. M. & S. J. 5: 146).

It is doubtful if Eve recognized the significance of Long's claim. Eve was a sick man, overloaded with responsibilities. He had just lost his son. He retired from the editorship of the failing journal at the end of the year with the statement that he personally paid out nine hundred dollars to publish the last numbers to complete the volume (S. M. & S. J. 5: 621). His three hundred subscribers were a great disappointment. As editor he had become involved in a number of controversies with the prominent men of the North. He took issue with the many medical colleges that had refused to lengthen the term of study to six months (S. M. & S. J. 5: 313). He jibed at the newly-founded New York school with its "fine granite building occupied by shops on the first floor" (p. 701); with Rush Medical College and its boast of the possession of a "fine microscope"; with Jefferson and Pennsylvania who allowed students to matriculate simultaneously in both

institutions. He accused Dunglison of rank plagiarism in the publication of his book on the "Practice of Medicine" (S. M. & S. J. 5:439 1848). He took issue with Oliver Wendell Holmes, chairman of the committee on publications for the newly formed American Medical Association, because Holmes refused to recognize the merits of Southern periodicals and force home his "Northern precepts" (S. M. & S. J. 5: 506).

Furthermore he was a busy practitioner, often being called on to operate as far west as Alabama. He states in *The Journal* that he made a trip of five hundred and forty-two miles, operated on a patient, stayed with him twelve hours, lost no sleep and was away from home only two days and three hours, a trip made by railroad and arrangements by telegraph (S. M. & S. J., 1848, p. 575).

He was professor of surgery in a rapidly growing school that had increased its enrollment from seventy-three in 1840 to one hundred and fifty in 1848, an institution struggling under a heavy burden, that had mortgaged its building to secure a debt of \$10,000.00, having failed to secure legislative aid. There is little wonder that he lacked enthusiasm to champion the cause of Long.

With the resignation of Eve as professor of surgery in 1850, Dugas succeeded to the control of both the school and *The Journal*. He became editor in 1853 and at once wrote to Jackson for a paper on ether anesthesia. Jackson complied and Dugas published Jackson's account as the leading article in the new series (S. M. & S. J. 9: 1 1853). Jackson reviewed the chemistry, manufacture and use of ether but there is no reference to priority. On page 63 Dugas, as editor, says: "We regard it as an honor to be favored with the contribution of the great discoverer of anesthetic properties of sulphuric ether."

How he could have overlooked Long's claim is amazing since in his section on "publications received" (p. 83) he acknowledged the report of the Hon. E. Stanley's discovery of ether; the congressional report of Hon. Bissel on Morton's request

for remuneration; and Wells' article on anesthesia.

On page 193, in discussing the relative claims of Jackson, Morton and Wells, he credits Jackson.

In the next number, page 254, he cites a letter from Dr. Long, referring him to the 1849 article, and in defense he wrote: "It seems that Long has yielded and relinquished his own right. Moreover as we were not the editor of *The Journal* at the time Dr. Long published his account, the full force of that communication has escaped our memory."

This is an interesting oversight. Can it be that Dugas had not read Long's account? Long, in his publication of 1849, stated on page 710 that one of the chief reasons that had caused him to delay publication was the prevailing view that surgery could be performed without pain under mesmerism. Dugas was the local exponent of that practice, having performed the operation for the removal of the breast in 1845 (S. M. & S. J. 5: 122), one of the first in America. Long referred to "men high in authority" as advocates of this procedure. Dugas who was nine years senior to Long, was high in authority, having published widely on all phases of surgery including lithotomy and lithotrity.

Dugas, however, admitted his error and states "We trust that he (Long) will not longer remain quiet, but use every exertion to throw the weight of his claims into the scales." On page 384 he republished Long's claims as presented to the newly-formed state medical society in its meeting at Savannah. At this meeting a committee of three was named to meet with Long and examine his evidence. They were R. Q. Dickenson of Albany (President); G. F. Cooper of Perry and S. N. Harris of Savannah. On page 386 is published their resolution: "Resolved — That it is the opinion of this Society that C. W. Long, now of Athens, Georgia, was the first person who used sulphuric ether as an anesthetic agent in surgical operation, and as a justice to Dr. Long, individually, and to the honor of the profession of our state, we recommend him to present

his claim of priority in the use of this most important agent to the consideration of the American Medical Association at its next meeting."

But Long had no one to press his claim in the A. M. A. The delegates from Georgia were Dugas and Garvin from the Medical College, and Arnold and Tufts from the State Society. The A. M. A. refused to enter the dispute, which had become highly involved and rankling of charlatanism.

The transactions of the A. M. A. for 1847 (p. 197) carry an extensive account briefed from the report of Bigelow in which he lists as an appendix, one hundred and fifty-four operations performed under ether and chloroform. Eve reported case histories but no mention of Long's claim was made. The Transactions for 1848-49-50-51-52-53-54 make no reference to Long.

He was not to be recognized until Marion Sims, after an accidental meeting with Wilhite, established his case of priority in 1877.

NURSE PARTICIPATION IN AN INDUSTRIAL HYGIENE PROGRAM

LESTER M. PETRIE, M.D.
Atlanta

The industrial nurse is a key person in the industrial hygiene program of any industry. Her effectiveness will depend to a considerable extent upon management's attitude and policies. When medical and nursing personnel are responsible to top management, best inter-department relationships may be expected.

Broadly speaking, industrial hygiene is concerned with the industrial worker and his environment. The medical approach investigates the worker and his physiologic response to working conditions, while the engineering approach covers the evaluation and control of the working environment. The nurse of necessity is immediately concerned with the medical aspects but she should also be intimately familiar with the engineering approach.

1. The nurse's responsibility for management and maintenance of the plant medical department is, of course, subject to medical supervision. Every nurse in industry should operate under written standing orders signed by the physician.

This clearly points to the fact that as an integral part of the group she cannot withdraw to her own special field and fulfill her potential responsibility.

To consider the industrial nurse in this light we mention the duties she is responsible for — as set forth in the report of the "Committee to Study Duties of the Nurse in Industry":

1. Management and maintenance of the plant medical department.
2. Nursing care of occupational injuries and illnesses.
3. Emergency care of non-occupational injuries.
4. Assistance in medical examination program.
5. Participation in health and safety education and accident control.
6. Assistance with environmental sanitation program.
7. Participation in plant welfare program.
8. Nursing services to ill or injured workers in their homes."

Through no stretch of the imagination will one individual working alone be able to fulfill these duties. First, management must know definitely what they wish the medical department to accomplish; that is, state their objectives — primarily this will be to maintain the production capacity of all workers at the highest possible level. But incumbent on this are specific objectives, such as reduction of absenteeism, reduction of accidents, adequate records, improved sanitary facilities, adequate feeding facilities, etc. Just what part the medical department and all other departments concerned play will depend upon policies established.

If the nurse confines her activities to management and maintenance of the medical department and care to the ill and injured workers, her influence will be extremely limited. If, on the other hand, she participates in health and safety education, accident control, and assists with environmental hygiene and sanitation and a general program of preventive medicine, her influence is going to reach far and come nearer fulfilling her part as an important cog in the organization.

It goes without saying that, primarily, control of absenteeism and accidents depends on knowing what the problem is. This information can be obtained only through analysis of accurate, concise records. The

records of accident and illness incidence are definitely the responsibility of the nurse. Her participation in recording absenteeism relates to ill and injured workers.

Participation in health and safety education and accident control must be a joint function with safety and industrial hygiene engineers and management as well as all medical personnel. Serious consideration must be given to the planning of joint functions to merit support and credence. Sporadic disconnected efforts by individual personnel and departments lead to confusion. No one is in a better position than the industrial nurse to see the need and possibility of such planning and be the promoter of it.

The safety and industrial hygiene engineers can assist the medical personnel in knowing the processes, materials and hazards to which the workers are exposed and the controls required to protect the workers. For example:

In a recent plant survey, the engineers found certain workers exposed to toxic concentrations of chromic acid mists; others were exposed to excessive lead fumes from welding on metal which had been previously painted.

The engineers assisted in the establishment of safe practices and in the design and installation of suitable equipment for environmental control. These procedures reduced the environmental hazards to a minimum as evidenced by analysis of air samples.

The physician and nurse had previously been completely unaware of the exposures. Medical controls were established. Special periodic examinations including laboratory tests were instituted for all workers exposed to these hazards. Any worker showing evidence of early poisoning was removed from the exposure before any permanent damage had been done.

The nurse should do individual health-safety education with the injured and ill workers reporting to the dispensary. She must be informed about the plant, its operation, processes and hazards.

The nurse has very valuable contributions to make to the safety committee. Her recording of accidents and illness by department will indicate to the group where occurrence is unduly high—frequent or sudden illness may indicate an unrecognized hazard or harmful environmental condition that otherwise would go undetected. She brings to the safety committee unprejudiced and objective attitudes of the workers.

The sanitary situation, particularly for women workers but also for the men, is a concern of the nurse as it has a direct bearing on lost time. An adequately furnished and used retirement room for women workers may save many days of lost time, particularly from menstrual disorders. Often the nurse is the only individual within the plant who has had any training in health sanitation whatsoever, and it is through her that the need is brought to the attention of management. This is particularly true in our small industries. Adequate eating facilities are her concern. Education pertaining to nutrition should hold particular interest for her. This may be done by the nurse or better, perhaps, by the use of community facilities.

We could go on endlessly enumerating the tremendous need for the nurse to participate actively and energetically in the health education of the employees—and also the employers—to bring to management the problems involved in the health of the worker and in their solution, the advantages of using resources within the industry coordinated with the resources of the community and state. Examples of such coordination are the community and state facilities for the control of tuberculosis, venereal diseases and nutritional deficiencies already being used by industry.

We have touched on a few of the many ramifications entailed in the nurse's participation in an adequate industrial hygiene program. Every industrial nurse should avail herself of current thinking in this field and consider her nursing duties as an integral part of a complete industrial hygiene program. Where she finds gaps she must set about planning with the plant physician, management, safety and industrial hygiene engineers and others within the plant to gradually increase her functions to meet existing needs. She should exhaust all resources, local and state, in an effort to meet the needs of her industry. Only in this way is she doing her most to assist the war effort.

To summarize, let us repeat that the industrial nurse must function as a component part of a complete unit. It is true that in

small industries she may be the only person employed to look after health and industrial hygiene problems. This makes her responsibility in securing active, interested cooperation from other departments all the more important. The things that we are interested in are the things we know something about — keep management, safety, engineering, personnel and welfare departments, informed of the medical-nursing program and its value. This will assure their interest, assistance and support. Production can be only as high as the physical and mental fitness of the individual worker will permit. Healthy, well placed workers in safe and controlled environment make for maximum production. Are you doing your utmost to insure this?

In the Georgia Department of Public Health we have our Industrial Hygiene Service eager to offer assistance to all industries in meeting their problems. Medical, nursing, chemical and engineering consultant service is available upon request.

DRAFT REJECTIONS STATISTICS AND THE NATION'S HEALTH

During the course of a hearing before the Pepper Subcommittee on Health and Wartime Education, recently, representatives of Selective Service presented statistics showing the large number of selectees who were rejected for physical or mental deficiencies. Conclusions have been drawn from the statistics that have caused concern to thoughtful physicians.

The Director of the Selective Service System, Major General Lewis B. Hershey, in presenting his testimony observed:

"If the citizenry of the future is to be prepared to insure peace by being able to make war, and if the citizens of the State are to be physically able to carry out their other duties efficiently and effectively, then there must be definite and positive measures taken to insure the development, the training and the conditioning of our youth to the end that they will be physically strong and emotionally stable. If they are not physically strong and emotionally stable, they will not be able to use the knowledge which has been imparted to them in our schools. It is idle to talk of a democracy, in which each citizen has equal opportunities with every other citizen and equal responsibilities with every other citizen, unless these citizens each and every one are able when

the responsibility comes to carry their part. There is no justice, there is no fairness, there is no democracy when 16,000,000 of our citizens must carry the load of 22,000,000 of our citizenry; and unless and until we are able to take such measures which will insure that the maximum of our citizens are able to bear arms, and able to accept all the responsibilities of citizens, we can have democracy only in name."

Colonel Leonard G. Rowntree, Chief of the Medical Division, National Headquarters, Selective Service System, who presented a most detailed analysis of the causes for rejections, advocated a program for making the nation biologically fit for whatever is its mission in the postwar world. He said:

"The Government of the United States — Federal, state, or local — has a rightful concern in the poor state of health evidenced in Selective Service findings. The rejectee in many instances is the victim of our modern civilization. The failure has been that of Federal, state, and community authorities, of the parents, of education, the church, and of medicine, dentistry and public health, and to some extent of the individual concerned. The remedy calls for concerted action on the part of all these groups responsible for the situation which was found to exist.

"The sociologic and economic factors are indissolubly bound up with the availability and utilization of good medical care. We are not the vigorous people that we thought we were. The people must be educated to accept the fact that we have a high percentage of defects, deficiencies, disabilities, disorders, and diseases. We must be educated to demand medical care in proportion to the demonstrated need of that care."

Dr. R. L. Sensenich of the Board of Trustees of the American Medical Association said:

"To make an intelligent approach to the question of causes and remedies of selective service rejection rates it would be necessary to have Selective Service reports from the separate states giving the number of rejections and the reasons for rejection. According to the testimony before the committee, Negroes contributed more than 44 per cent of the rejections for mental deficiency and more than 60 per cent of the rejections for venereal diseases. Concentrations of diseases vary and differences were reported between rural and urban areas. Local conditions should then be studied and possible remedies, if any, be properly evaluated.

"It was estimated that approximately only one out of six were rejected because of remediable defects. It must not be assumed that because the defects were considered to be remediable that failure to have a possible correction was due to inability to obtain such medical service. More often failure is due to lack of interest or unwillingness to accept treatment to correct the

condition. Less often it is due to ignorance of the importance of correction or failure to inquire if such service is available to the individual. There are numerous provisions for those unable to pay for medical service. Final failure to obtain needed medical care, if it is sought, rests generally upon failure of some agency of government to carry out the purpose to which it is directed in assistance of those in need.

"The greatest significance in reports of rejections for the armed forces would seem to be in the notable lack of self-interest and effort to secure or maintain a high level of mental and physical fitness. Those without recognizable defects fail to observe even the simplest program of regulation or discipline directed to the maintenance of good health. Routines of living for purpose of hardening or attainment of physical vigor are often referred to only with contempt.

"Plans are well along in preparation for the broadest national activity to stimulate an interest in physical fitness. This will be directed to the homes, schools, churches, labor and industry, and social and professional groups. This activity is being organized under the leadership of a Joint Committee from the American Medical Association and the Committee on Physical Fitness of the Federal Security Agency. The work will be financed from many private sources. The activity gives promise of being by far the greatest national movement undertaken to stimulate interest and effort toward physical fitness. This represents in a striking way the desire and readiness of the public to organize its efforts and work together as a voluntary association of citizens to meet national problems when the need is recognized.

"Before the war the number of doctors per population in local communities varied from one to a few hundred, to one to several thousands. However, in the main, a doctor was found wherever the medical care requested by the population and the facilities available made the practice of medicine possible, provided the economic conditions of the community were such that he could support himself.

"The mistake has been made of concluding that because a sizeable community had no physician and should have one that the people were actually conscious of their need for a physician and would employ him. Physicians going into these communities, even with financial support while getting established, very frequently found this to be in error. People must be sufficiently well informed as to what medical care can do for them before they will avail themselves of the services of a physician or any medical facilities available to them. The Procurement and Assignment Service for Physicians, Dentists, and Veterinarians has done an excellent job in preventing serious depletion of medical personnel where their services were needed by the civilian population.

"The cost of good medical care is not prohibitive to the average earner. The average illness is not beyond his ability to pay without hardship. More than average sickness costs may be paid in small budgeted installments. Many medical societies have agencies to adjust total payments and installments, to the patient's ability to pay without hardship. The national total amount of commitments to time payment of medical bills, according to economists, is small when compared with commitments generally approved for less important items.

"The indigent are the responsibility of local government agencies and in most areas are adequately cared for. The relatively high concentrations of persons with minor mental abnormalities, not sufficiently ill to require institutional care, and those in the older ages with chronic conditions, although receiving medical care, provide an unhappy background for which there is no satisfactory solution at this time. This is not essentially a medical problem.

"The American Medical Association has given more study over a longer period of time to medical service plans, built upon budgeting or insurance, than any of the institutions or individuals advocating such systems. This study has covered all existing systems throughout the world. Many years ago the House of Delegates of the American Medical Association stated in substance that there is nothing inherently good or bad, from a medical point of view, in different methods of collection. Insurance, budgeting, and advance financing are only methods of conducting an economic transaction. However, experience has shown that in compulsory government insurance the economic soon becomes the dominant factor and quality of service is secondary.

"In effect, compulsory government insurance quickly becomes more than an economic transaction. Government as a controlling third party fixes the terms to the purchaser of the insurance and compels him to pay. It likewise fixes the terms upon which the physician must furnish the service, and most often under conditions that then make it impossible for the individual to have the best service or to have the services of the physician he would select. Quality of service deteriorates. Better men are no longer attracted to the field of medicine, and for the insured, the medical service deteriorates to the dead level of mediocrity and minimal service. The government becomes the employer and the close personal relation of patient and physician and personal responsibility so necessary to helpful medical care disappears.

"The American Medical Association has for years approved of experimentation in medical service plans by state and county medical societies. This was for the purpose of exploring the possibility of extending medical care to income groups to whom severe illness was especially burdensome. The efforts to be directed to determining conditions under which medical care

might be maintained at high levels and personal relationship between the patient and physician might be preserved. Twenty states now have such plans in operation or are in process of preliminary study, enabling act or experimentation sponsored by the state medical society. In addition to these, thirty-eight states cooperate with the Farm Security Administration. Most of the state plans of state societies are now on a sound financial basis. The service offered varies but changes are brought about as actuarial information is gained. Most of the nation may soon be included in these state plans."

Dr. Roger I. Lee, president-elect of the American Medical Association, added:

"It is customary and accurate to state that the United States has the finest health record in the world. But that is not enough. It is true, as every sensible man knows, that the practice of medicine in the United States is undergoing rapid change, but that has been true for the past fifty years. It will be true for the next fifty years. Already much experimentation has been made in many ways concerning pre-payment plans in the practice of medicine. Some of these plans have been discarded as unsound. Others have 'folded up' as unsuccessful. The use of the insurance principle has a very definite appeal. There are serious difficulties in the application of the insurance principle to illness. Certainly the insurance principle seems to be working fairly but not completely successfully in voluntary prepayment hospitalization plans. General prepayment sickness plans seem to be working fairly but not completely successfully when the insured group is homogenous as in some industries or in universities. General plans find great difficulties in the heterogenous population of this vast country. There is a tendency to make these general plans compulsory, to cover wage earners up to a certain level of income only and, as in the case of Great Britain, not to include the dependents of wage earners, not to include the destitute, and not to provide consultant and specialist service. The experience of Great Britain with its National Health Insurance Plan, so often quoted pro and con, has met grave difficulties and has not resulted in furnishing medical service that approaches the quality of the medical care in the United States. The maintenance of the quality of medical care in this country is fundamental in any health program. It is hard to improve the phraseology of a British recommendation: 'There should be initiated by arrangement and agreement between the government and the profession, organized experiments in the methods of practice, such as group practice, including health centers of different kinds, which should extend to general practitioners hospital units attached to general hospitals. Future developments in group practice should depend on the results of such clinical and administrative experimentation.'

"We live in a changing world. Good roads, airplanes and other new devices will have a part in the changes in our lives and in medical practice. Controlled scientific experimentation can, I think, be depended upon to develop sound medical care for everyone in the United States. This will require the cooperation of the government, the medical profession and the public."

COMMUNICATION

Editor, The Journal of the Medical Association of Georgia:

Atlanta, Georgia.

For your consideration, and the members, I wish to relate my latest treatment for burns of the body. Probably I have run the gamut in treating burns prior to this latest experience. Always these extensive burns resulted in infections with granulations, necessitating skin grafting. These were not always successful, and resulting bad scars were unsightly.

Tyrothricin (a Sharp & Dohme product) has been used extensively in superficial infections of all kinds, including burns.

When the burned patient is first encountered he or she is treated in the usual orthodox manner; that is, cleansing, debridement and combating shock by the administration of narcotics and plasma. After all these are accomplished in a satisfactory manner, the patient is placed on sterile sheets and a cradle is used over the bed. No dressing is required and no gown or pajamas worn. Sterile loin clothes are used in extensive body burns. Tyrothricin is sprayed on the burned areas twice daily. Plasma is used extensively intravenously. Tyrothricin has been used exclusively by me in treating minor burns and only three times in very extensive burns, but with most amazing good results.

Following is a short resume of the latest case:

A truck driver's clothes became ignited with gasoline. He attempted to put out the fire by rolling in a mudhole and slapping fire with his hands. He sustained second degree burns of his abdomen from the pubis to his face and ears, reaching one-half around his body on both sides. His hands and arms were terribly burned.

Under anesthesia he was thoroughly cleansed and given blood plasma. Subsequently he received 2400 cc. of plasma. Tyrothricin was used twice daily as a spray from a common atomizer. Penicillin and sulfathiazole were used during his hectic stage, when sloughing of the deeper burns became evident. At the expiration of two weeks all the charred skin was removed. The underlying skin was clean and no evidence of granulation tissue was observed. At three weeks it was very evident that healing was perfect and no scarring would result. This case, using tannic acid or gentian violet, or any other treatment, would have resulted in long hospitalization, skin grafting, etc.

Certainly this treatment merits further trials. There has been no untoward reactions in its use. Incidentally, the manufacturers have not mentioned Tyrothricin as a possible treatment of burns.

FRANK K. NEILL, M.D.

P.S. Reported before Dougherty County Medical Society, Albany, Oct. 10, 1944.

NEWS ITEMS

The Post-Graduate Clinics of the Fulton County Medical Society were held November 2 at Grady Hospital and the Academy of Medicine, with Dr. W. W. Daniel and Dr. Stephen T. Brown presiding. Welcome by Dr. Ben H. Clifton, president, Fulton County Medical Society. Titles of various papers and discussions were: "Clinico-Pathological Conference," Dr. Jas. E. Paullin and Dr. W. B. Matthews; "Pyelitis and Pregnancy," Dr. J. R. McCord; "Clinic on Breast Lesions," Dr. Wm. Perrin Nicolson; "Clinic on Blood Dyscrasias," Dr. R. R. Kracke, dean, University of Alabama School of Medicine; "Treatment of Acute Glomerulo-nephritis," Dr. Robert L. Whipple, Jr.; "Use of the Miller-Abbott Tube," Dr. Lon Grove; "Penicillin Therapy" (round table discussion), Dr. Paul Beeson leading. "Use of Physiologic Salt Solution, Plasma and Whole Blood in the Treatment of the Injured Persons," Dr. Eugene Stead; "Clinic on Cancer of the Mouth and Face," Dr. Elliott Scarborough; "The Newer Types of Treatments of Syphilis," Dr. Albert Heyman; "Vomiting in the Newborn," Dr. M. Hines Roberts; "Treatment of Acute Congestive Failure," Dr. James V. Warren; "Treatment of Thrombophlebitis and Pulmonary Embolism," Dr. Charles Ward; "The Importance of the Rh Factor in Blood Transfusions," Dr. Elizabeth Gambrell; "Use of Peritoneoscopy in the Differential Diagnosis of Ascites," Dr. Maxwell Berry; paper of the evening: "Treatment of Secondary Anemia," Dr. R. R. Kracke.

The Georgia Pediatric Society will hold its twelfth annual meeting in Atlanta December 14. An excellent program has been arranged. Afternoon: Biltmore Hotel, Pompeian room; evening: Academy of Medicine, with buffet supper at 6:30.

Governor Ellis Arnall and the Georgia Volunteer War Services Council held a "One-Day Citizens Conference" of the 144 committee members of the Georgia Volunteer War Services Council, and 150 representatives of State-wide and Local Service Organizations for the purpose of deciding how, by working together, they can hasten victory and improve economic and other conditions for youth, our returning veterans and all Georgians, at the Biltmore Hotel, Atlanta.

Dr. F. C. Holden, 1112 Medical Arts Building, Atlanta, having completed post-graduate work in the field of proctology at Boston, announces that, beginning Dec. 1, 1944, he will specialize in diseases of the anus, rectum and sigmoid colon.

The Georgia Baptist Hospital staff dinner meeting was held October 17 in the Nurses' Home dining room. Dr. Major Fowler, chairman of the Clinico-Pathological Conference, discussed an interesting case of "Diabetes Mellitus Complicating Obstruction of the Common Duct by Gallstone."

Dr. Charles R. F. Beall is now located at 618 Doctors Building, Atlanta, for the practice of psychiatry. Hours by appointment from 5 to 6:30 P.M.

The Fifth District Medical Society met at the Academy of Medicine, Atlanta, November 16. Buffet supper at

6:30 P.M. and scientific program at 8 P.M. Addresses were made by Dr. Cleveland Thompson, president, Medical Association of Georgia; "Emergency Maternity and Infant Care Program of Georgia," Dr. Edwin R. Watson, Georgia Department of Public Health; "Medicine in the Bible," Lt. Col. Louis Krause, Lawson General Hospital. Officers: President, Dr. Jeff L. Richardson; Vice-President, Dr. J. C. Massee; Secretary-Treasurer, Dr. Geo. A. Williams; Councilor, Dr. Marion C. Pruitt; Vice-Councilor, Dr. S. A. Kirkland.

Officers of the Woman's Auxiliary: President, Mrs. Shelley C. Davis; Vice-President, Mrs. F. K. Boland; Secretary, Mrs. L. H. Hamff. Miss Emily Woodward was guest speaker before the Auxiliary and talked on her recent trip to England. All members of the Auxiliary were invited.

Emory Medical Unit in North Africa was cited by Major General Norman T. Kirk. Praise for the work of the unit was contained in a letter received by President Goodrich C. White, Emory University. Major General Kirk wrote: "The entire country has good reason to be proud of the fine work which our doctors, nurses and corps men are performing. You have particular reason to be proud of this work because your university contributed so much to the high standards of medical care which the Army is now able to make available to its fighting men."

Dr. Wm. C. Thompson, Dublin, has been appointed to the staff of the United States Veterans' Hospital No. 48, Atlanta. He has practiced medicine in Dublin for the last 29 years.

Dr. G. T. Nicholson, who has been a member of the medical staff at Downey Hospital, Gainesville, for the past year, has resigned to enter private practice at Cornelia.

Dr. C. A. Henderson, city-county health officer of Savannah, attended a meeting of the American Public Health Association in New York City. Since his return Dr. Henderson spoke at the schools of nursing of the Warren A. Candler and St. Joseph's hospitals on "Factors in the Community Affecting Control."

Dr. M. E. Winchester, Brunswick, health officer of Glynn County, was one of 65 public health officers in the United States and Canada who has been added to the National Health honor roll, which is jointly sponsored by the American Public Health Association and the United States Chamber of Commerce.

The Bibb County Medical Society held its regular meeting at Ridley Hall, Macon, Oct. 17, 1944. "Clinical Cases" were discussed.

The Seventh District Medical Society met at the Peerless Woolen Mills recreation hall, Rossville, Sept. 30, 1944, with the Walker-Catoosa-Dade County Medical Society as guest. Welcome by Mr. John L. Hutcheson. Address by Dr. Cleveland Thompson, president, Medical Association of Georgia. Titles of scientific papers were: "Penicillin," Capt. Albert Evans, M.C., of the Fourth Service Command; "Some Psychiatric Trends of Recent Years," Dr. Frank Luton, Vanderbilt University, Nash-

ville, Tenn.; "Diagnosis and Treatment of Low Back Pain," Dr. John S. Speed, Memphis, Tenn. Officers: President, Dr. William Harbin, Rome; President-elect, Dr. Fred H. Simonton, Chickamauga; Secretary-Treasurer, Dr. W. C. Mitchell, Smyrna.

The Woman's Auxiliary to the Seventh District Medical Society met September 20. Addresses by Mrs. W. T. Randolph, Winder, president, Georgia Woman's Auxiliary, and Dr. Cleveland Thompson, Millen, president, Medical Association of Georgia. Officers: District Manager, Mrs. J. E. Billings, Calhoun; District Secretary, Mrs. Murl Hagood, Marietta.

The Semi-annual meeting of the Eighth District Medical Society met Oct. 10, 1944, at Y. M. C. A. Auditorium, Waycross. Meeting called to order by Dr. G. E. Atwood, president, Waycross. Welcome by Prof. Ralph Newton, superintendent, Waycross City Schools. Scientific program: "The Use of Low Forceps," Capt. Funk, M.C., U. S. A., Waycross Air Base; "Virus Pneumonia," Major J. S. Yoskalka, M.C., U. S. A. Station Hospital, Moody Field; "Palliative Treatment of Low Back Pain and Sciatica," Dr. W. W. Turner, Nashville; Address by Dr. Ralph H. Chaney, president-elect, Medical Association of Georgia, Augusta. Officers: President, Dr. G. E. Atwood, Waycross; Vice-President, Dr. J. R. Gay, Waycross; Secretary, Dr. G. T. Crozier, Valdosta.

OBITUARY

Dr. W. W. Birdsong, one of Athens' most prominent physicians and surgeons for more than twenty-five years, died unexpectedly at his home, 150 University Drive, Athens, Oct. 10, 1944. He was sixty-one years of age, and a graduate of Emory University School of Medicine, Atlanta, in 1911. Dr. Birdsong was born near Carrollton where he started practicing medicine. He volunteered for service in the first World War. Dr. Birdsong had done post-graduate work at Tulane University, Johns Hopkins, Chicago Medical School and Hospital, and had taken additional courses in operative surgery in which his ability was recognized when he was selected as a Fellow in the Southeastern Surgical Congress. One of Athens' most popular medical figures, Dr. Birdsong was a member of the Medical Association of Georgia, the Clarke County Medical Society and the First Baptist Church, and was a Mason and Shriner. He is survived by his wife, a daughter, Mrs. R. J. Echles, Savannah; two sons, W. W. Birdsong, Jr., of the Navy, and William Birdsong of Athens.

Dr. John Weyman Davis, Charleston Naval Surgeon and a native of Athens, died Sept. 18, 1944, at the age of forty-two. He was a graduate of Emory University School of Medicine, Atlanta, a member of the Medical Association of Georgia and Clarke County Medical Society. Dr. Davis was widely known in North Georgia medical circles and entered the Navy in May 1941, serving thirteen months at Pensacola (Fla.) Naval Hospital and eighteen months aboard the gunboat *Charleston*.

Dr. Michael Hoke, born in Lincolnton, N. C., June 28, 1874, died in Beaufort, S. C., Sept. 23, 1944, at the age of seventy. Dr. Hoke graduated at the University of

Virginia Medical College in 1895. He began the practice of medicine in Atlanta and, with three others, founded the Scottish Rite Hospital for Crippled Children and served as chief surgeon of the hospital for about ten years. When the Warm Springs Foundation was organized in 1927 he became medical director at the request of President Roosevelt. He was a 33rd degree Mason and a member of Gate City Lodge No. 2, F. and A. M., Ancient and Accepted Scottish Rite, Yaarab Temple of the Shrine, American Medical Association, Medical Association of Georgia and American Orthopedic Association. Surviving are his widow, Mrs. Laurie Harrison Hoke; two daughters, Mrs. Charles McGee, Beaufort, S. C., and Mrs. Edward Jastrum, St. Louis, Mo. Funeral services were held at the graveside in Raleigh, N. C.

Dr. John Payson Kennedy, retired Atlanta health officer, died Sept. 17, 1944. Retired in July, 1944, the eighty-year-old physician had served as city health officer since 1901, having organized the Health Department. He began his practice of medicine in Atlanta in 1890. He graduated at New York University Medical College in 1887 and was licensed in Georgia in 1891, and was a member of the Medical Association of Georgia. Dr. Kennedy is survived by a daughter, Mrs. Sarah Kennedy Hurt, Atlanta, and several grandchildren. Funeral services were held at Spring Hill, Atlanta, Rev. Sam Pinkler officiating, with burial in West View Cemetery.

Dr. Omar F. Elder, aged 58, widely known Atlanta urologist, died at his residence, 65 Muscogee Ave., N.W., Atlanta, Oct. 25, 1944. Born in Watkinsville, Ga., the son of the W. J. Elders, Dr. Elder was graduated in the class of 1909 from the Atlanta College of Physicians and Surgeons, now a part of Emory University. After his graduation he was house physician at Piedmont Hospital under the late Dr. Floyd McRae, Dr. Bates Block and Dr. Michael Hoke. He later became the associate of Dr. Edgar G. Ballenger and Dr. Hal P. McDonald, Atlanta urologists, with whom he was associated until ill health forced him to retire.

Dr. Elder had contributed, in collaboration with Dr. Ballenger, articles on urology to medical journals and had lectured at the Medical College from 1916 to 1926. He was a member of the Fulton County Medical Society, Medical Association of Georgia, and the Peachtree Christian Church. In addition to his wife, Mrs. Marielen Hargrove Elder, he is survived by a son, Lt. Omar F. Elder, Jr., of the Navy. Funeral services were held at Spring Hill with Dr. Robert Burns and Dr. Ryland Knight officiating. Interment in West View Cemetery.

Dr. John P. Turk, Nelson, prominent Pickens County physician, died at his home in Nelson at the age of 65, Oct. 26, 1944. He had practiced medicine in Pickens County for forty years. He graduated from the Atlanta College of Physicians and Surgeons, now a part of Emory University, in 1904. Dr. Turk was a member of the Cherokee-Pickens County Medical Society, Medical Association of Georgia, the Pickens County Selective Service Board, the Ball Ground Lions Club and the Nelson Methodist Church. He was prominent in civic and religious circles. He was former mayor of Nelson

and past master of the Masonic lodge. Surviving are his wife, the former Mae Bess Scott; four sons, Dr. Scott Turk, Quincy, Fla.; Capt. W. B. Turk, U. S. Army, Fort Riley, Kan.; Lt. J. P. Turk, Jr., U. S. Navy, in the Pacific; and Lt. Tully R. Turk, in the South Pacific. Funeral services were held at Nelson Methodist Church. Interment in South View Cemetery, Canton.

Dr. George Foster Eubanks, Atlanta, Lt. Colonel of the Army Medical Corps, died in southern England, Sept. 25, 1944, at the age of 44. He was born in Atlanta, the son of Mrs. George F. Eubanks and the late George F. Eubanks. He was graduated in medicine from Emory University School of Medicine in 1925. He served his internship at Emory University Hospital, followed by post-graduate work at Mayo Clinic and the Knoxville General Hospital, Knoxville, Tenn.

Dr. Eubanks began private practice in Atlanta and limited his work to proctology. He was a member of the Fulton County Medical Society, Medical Association of Georgia, Resident and Ex-Resident Physicians of the Mayo Clinic, a Fellow of the American Proctologic Society, American Medical Association, the Southern Medical Association and the Southeastern Surgical Congress. He had been certified by the American Board of Surgery.

A memorial service was held Friday, Oct. 6, at the North Avenue Presbyterian Church, of which he was a member. He is survived by his wife, a daughter, Eloise Eubanks, two sons, George and Bill Eubanks; his mother, Mrs. George Eubanks, Atlanta, and a sister, Mrs. Alfred C. Howard of Wisconsin.

Dr. Joseph T. Brice, Cumming, aged 78, member of a well-known Northeast Georgia family and a practicing physician for more than 50 years, died Oct. 2, 1944, at his home in Forsyth County. Dr. Brice was a native of Dawson County, a son of the late Mr. Thomas R. Brice and Mrs. Mary Andoe Brice. He was a graduate of Emory University School of Medicine, Atlanta, and had availed himself of a number of post-graduate courses. He was a practicing physician at Lewiston, Mont., for about 40 years before returning to Forsyth County 14 years ago, to engage in practice with his brother, the late Dr. George Brice. He was a member of the Forsyth County Medical Society, the Medical Association of Georgia and the Baptist Church. Surviving are his wife, Mrs. Helen B. Brice, two sons, Dr. Julian T. Brice, Forsyth County; Lt. Richard Brice, South Pacific; a daughter, Mrs. George M. James, Ottawa, Canada. Funeral services were held from the residence, with the Rev. Chas. Gazaway officiating, and burial was in Cole Mountain Cemetery.

Dr. Daniel Noble Johnson, aged 93, general practitioner for more than 40 years, died Oct. 18, 1944, at his residence, 512 Clairmont Ave., Decatur. Born at Johnson Estates, Atlanta, son of Daniel and Elizabeth Chandler Johnson, he lived there until he moved to Decatur in 1923, except for a short period during Sherman's siege of Atlanta in 1864, when the family moved to Madison. Dr. Johnson was a graduate of the old Georgia College of Eclectic Medicine and Surgery, Atlanta, in the class

of 1881. He was a member of the DeKalb Medical Society, the Medical Association of Georgia, and a charter member of the Rock Springs Presbyterian Church, where he had served as deacon for 72 years. He is survived by three daughters, Mrs. M. R. Hunnicutt, Leesburg, Fla.; Mrs. W. A. Ozmer and Miss Susie Johnson, both of Decatur, several grandchildren and great-grandchildren. Funeral services were held at Trinity Chapel with the Rev. Bonneau H. Dickson officiating. Interment in Decatur Cemetery.

THE SEVENTH ANNUAL FORUM ON ALLERGY WILL MEET IN PITTSBURGH

The Seventh Annual Forum on Allergy will be held in the Hotel William Penn, Pittsburgh, Pennsylvania, on Saturday and Sunday, January 20-21, 1945. This is a meeting to which all reputable physicians are most welcome, and where they are offered an opportunity to bring themselves up-to-date in this rapidly advancing branch of medicine by two days of intensive post-graduate instruction. For instance, the twelve study groups, any two of which are open to him, are so divided that those dealing with ophthalmology and otolaryngology, pediatrics, internal medicine, dermatology and allergy run consecutively. In addition, the study groups are arranged on the basis of previous registration. In this way, as soon as the registrations are completed, the registrant is expected to write the group leader and tell him just what questions he wants brought up in the discussion. Attention is also called to the fact that during these two days almost every type of instructional method is employed. Special lectures by outstanding authorities, study groups, pictures, demonstrations, symposiums and panel discussions.

On Friday evening preceding the Forum, the American Association of Allergists for Mycological Investigation will hold its annual meeting at which time the results of their cooperative research on the Allergy to Fungi will be reviewed. All reputable physicians and scientists are invited to attend this interesting summarization of a year of brilliant cooperative research.

Although the program is most intensive, informality and an emphasis on the practical marks the conduct of the whole meeting. Good fellowship at luncheon, dinner and smoker reigns throughout the two days. Last year, the tradition was established of dining together throughout the meeting, thus offering an exceptionally fine opportunity to meet and come to know many distinguished authorities in this new and rapidly advancing field of medicine.

This international post-graduate society was founded in 1938 at Cincinnati, Ohio, to provide a place in which to review the progress of clinical allergy, to provide in peace times a Forum for the younger members, and to offer intensive post-graduate instruction in allergy to physicians working in other fields. The founders were Dr. Tell Nelson, Chicago, Illinois; Dr. Karl D. Figley, Toledo, Ohio, and Dr. Jonathan Forman, Columbus, Ohio. Annual meetings have been held each year since: in Toledo, Ohio, in 1939; in Chicago, Illinois, in 1940; in Indianapolis, Indiana, in 1941; in Detroit, Michigan, in 1942; in Cleveland, Ohio, in 1943, and in St. Louis, Missouri, in 1944.

In 1940 the name was changed to correspond to the international character of its attendance and the Forum's Gold Medal and annual oration were established as a means of recognizing outstanding contributions to clinical allergy. The first recipient was Bela Schick, New York City, who introduced the word "allergy"; the second was W. W. Duke, Kansas City; the third, Arthur F. Coca, New York City; the fourth, Robert A. Cooke, also of New York City. This year the Forum medal goes to Milton J. Rosenau, Chapel Hill, North Carolina.

This year the Marcelle prize has been established through the generosity of the Marcelle Cosmetics, Inc., and will be given to the author of the best papers on allergy appearing in the American medical literature during the year. The first prize will be for three hundred and fifty dollars and the second prize for one hundred and fifty dollars. The awards will be based on the decision of a jury of distinguished allergists.

For further information, copies of the book and registration, write Jonathan Forman, M.D., Director, 956 Bryden Road, Columbus 5, Ohio.

AN INSIGHT TO SIMPLIFICATION AND STANDARDIZATION IN HOSPITALS

Realizing that constant research is necessary for wise hospital purchasing, the Simplification and Standardization Committee of the Council on Administrative Practice, American Hospital Association, has standardized a number of strictly hospital commodities, eliminated superfluous types, and published its recommendations in pamphlet form with the cooperation of the National Bureau of Standards, Washington, D. C.

The committee called upon the Bureau of Standards to develop quality standards for non-rubber sheeting for mattress protection. A satisfactory formula was arrived at, and accepted by the manufacturers and the committee.

A new simplified list of twenty-two hypodermic needles has just been adopted by the research group and recommended to all hospitals as a standard, approved by Dr. M. T. MacEachern on behalf of the American College of Surgeons. Work is now progressing on the standardization of surgical instruments, blankets, patients' gowns, and surgical dressings.

The committee is making an effort to have a research associateship established by the American Hospital Association at the National Bureau of Standards in Washington, to establish liaison with those carrying on development and research of interest to hospitals, to report the views and needs of hospitals where developments are in process, to keep the American Hospital Association informed of developments, and to gather, integrate and develop improvements, suggestions or discoveries having a bearing upon the hospital field.

The Medical Association of Georgia will hold its next annual session in Macon, May 8-11, 1945. Headquarters City Auditorium.

TWELFTH ANNUAL SCIENTIFIC MEETING OF THE GEORGIA PEDIATRIC SOCIETY

Afternoon Session, Pompeian Room, Biltmore Hotel
Evening Session, Academy of Medicine,
Fulton County Medical Society

ATLANTA, GEORGIA
December 14, 1944

Officers of the Georgia Pediatric Society:

Ruskin King, M.D., Savannah, President
A. M. Johnson, M.D., Valdosta, President-Elect
W. C. Boswell, M.D., Macon, Vice-President
Don F. Cathcart, M.D., Atlanta, Secretary-Treasurer

Scientific Committee:

W. W. Anderson, M.D., Atlanta
L. H. Muse, M.D., Atlanta
Joseph Yampolsky, M.D., Atlanta, Chairman

12:30 P.M. Luncheon, Pompeian Room, Atlanta Biltmore.

1:45 P.M. Afternoon Session, Pompeian Room.

1. Care of Emergencies Arising During the Acute Stage of Infantile Paralysis.

Robert L. Bennett, M.D., Director of Physical Medicine, Georgia Warm Springs Foundation, Warm Springs, Georgia.

2. The Effect of Maternal Diabetes Mellitus on the Viability of the Fetus and Newborn Infant.

Herbert C. Miller, M.D., Assistant Professor, Department of Pediatrics, Yale University School of Medicine, New Haven, Connecticut.

3. Sulfonamide Allergy in Children.

Bret Ratner, M.D., Clinical Professor of Pediatrics, New York University, New York, N. Y.

6:30 P.M. Buffet Supper, Academy of Medicine, prepared by the wives of the Atlanta Pediatricians, under the chairmanship of Mrs. W. W. Anderson, Atlanta.

7:30 P.M. Evening Session, Academy of Medicine, Main Auditorium.

1. Address of Welcome:

a. Cleveland Thompson, M.D., Millen, President, Medical Association of Georgia.

b. Ben H. Clifton, M.D., Atlanta, President, Fulton County Medical Society.

2. Response to Address of Welcome:

Helen Bellhouse, M.D., Thomasville.

3. Importance of Recognizing Incipient Deformities in Acute Poliomyelitis.

Robert L. Bennett, M.D., Warm Springs. Introduction: L. H. Muse, M.D., Atlanta.

4. The Allergic Child.

Bret Ratner, M.D., New York, N. Y. Introduction: Joseph Yampolsky, M.D., Atlanta.

5. Erythroblastosis Fetalis: What Is It?

Herbert C. Miller, M.D., New Haven Connecticut.

Introduction: W. W. Anderson, M.D., Atlanta.

THE PRESIDENT'S PAGE

"HIM THAT MAKES SHOES GOES BAREFOOT HIMSELF"

Possibly the most generally used word today on all occasions is "service." Every red-blooded patriot feels deeply the desire and necessity of serving the best he can on the "home front" if he is not privileged to go into uniform; and it is a matter of humble gratification to the medical profession that doctors are so vital to the well-being of the workers who are bearing the terrific strain at home, as well as the soldiers in combat. With 40 per cent of us serving the 11,000,000 men in the armed forces, and with only 60 per cent of us to take care of some 120,000,000 citizens at home, the obligation has reached gigantic proportions. Added to this demand of war, money has been freer during the past two years than in two decades before, and patients who have not been able to afford medical attention are now bringing their entire families to the doctor.

What I am getting at is that the doctor is breaking under the strain and thus defeating his own opportunity to serve. The death rate in 24 months has been alarming, the average age at death being not much above fifty, and the usual mode of leave-taking is "heart failure." I am deeply impressed that the doctor has no greater obligation than to measure his strength and never let himself reach the saturation point of fatigue. Measured by cost and utility, the profession is too dear to be expended abusively. I believe that the only means of preventing this is to have certain periods of relaxation and rest weekly, or surely once in a month. Chauncey Depew said that a man could do a year's work in ten months



but not in twelve, and I say that a doctor can do work eighteen hours a day for six days and be exhilarated and buoyant at it, but seven such days a week will sooner or later kill him, and of late it has been "sooner" too often.

Every day a doctor seriously warns some patient against burning the candle at both ends, and tells him his only physical security lies in his consenting to unbuckle the harness and "kick up his heels" a little. Now doctor, look in the mirror and repeat this most meaningfully to the person you see there. I wouldn't confess it to a layman, but there is a mixture of vanity, greed, ambition and more particularly pure selfishness in the pleasure of work that drives a doctor to wear himself out. It is all mixed up with loyalty, magnanimity, sympathy and the inordinate desire to serve — all said, a magnificent obsession, too valuable to expend heedlessly. But let's unbuckle the routine, shift it occasionally, take our own blood pressure, and get regular hours of rest. It is the only way to stay off the great Reaper — it is a matter of PATRIOTIC DUTY.

CLEVELAND THOMPSON, M.D.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to the Welfare of the Medical Association of Georgia

478 Peachtree Street, N. E., Atlanta, Ga.

NOVEMBER, 1944

WHAT TO EXPECT UNDER BUREAUCRATIC MEDICINE

The Governing Council of the American Public Health Association on October 4 adopted a report favoring in effect a federal plan of compulsory health insurance, without consultation with medical and dental leaders of the nation, despite a proposal to do so. This indicates, *The Journal of the American Medical Association* for October 14 declares, the attitude that may be expected of those committed to federal control of all matters in the health field if they should have control of the Washington bureaucracy that would dominate American medicine should their ideas become effective. *The Journal* says:

"At its annual meeting in New York, October 4, the Governing Council of the American Public Health Association adopted a report favoring in effect a federal plan of compulsory health insurance. . . . This report, first prepared by a subcommittee, was approved after several amendments by the association's Committee on Administrative Practice. The proposed medical service would be supported by social insurance, supplemented by general taxation, or by general taxation alone.

"The ratification of the report as amended came after extended debate in which there was opposition to the adoption and publication of the report as a stated policy of the association. Those who opposed pointed out (a) that the administration of public health in the United States was by no means so universal or so generally adequate that public health departments in general were ready for this step. (b) that before the association placed itself publicly on record in the terms of this report there

should be consultation with the most interested professional groups, particularly the American Medical Association and the American Dental Association, and (c) that the publication of the subcommittee report, its approval by the Committee on Administrative Practice and the call for adoption in the Governing Council occurred within less than thirty days elapsed time, although the subcommittee had been working on the report for a year.

"The motion to adopt the report was made at the October 2 meeting of the Governing Council and was extensively debated at that time. Action was postponed until the October 4 meeting. At that time an amendment was offered to the motion to adopt. This amendment called for the Governing Council to receive this portion of the report of the Committee on Administrative Practice and to refer it to the Executive Board of the American Public Health Association with instructions to confer with the Board of Trustees of the American Medical Association and with the American Dental Association in an attempt to arrive at a statement which these three great professional groups could support. The amendment was lost by a standing vote approximately three to one after a voice vote had left the chair in doubt. The Governing Council then proceeded to vote on a motion to adopt the report; this vote was 49 Aye and 14 No. The opposition to the adoption of the report was led by Drs. Walter A. Bierring, Past President of the American Medical Association, Haven Emerson and W. W. Bauer.

"Now what is the group that adopted this report? Of the 7,493 members of the American Public Health Association 1,571 are Fellows. Only Fellows have a right to vote for governing councilors; the vote is conducted by ballot given to each Fellow when he registers at the meeting; Fellows not in attendance do not have a vote. The Governing Council consists of approximately 100 members, of whom 30 are elected by vote of the Fellows, 10 each year for three year terms; the rest of the members of the Governing Council hold membership

by virtue of being section officers or representatives of affiliated (mostly state) public health associations. Members of the association other than Fellows can vote only on section affairs. The report on compulsory health insurance represents, therefore, the action of the subcommittee which prepared it, the Committee on Administrative Practice which approved it and the 49 members of the Governing Council who voted in its favor. Here is not a democratic practice in action; here is a shrewdly manipulated performance by full time public officials, economists, bureaucrats. Most of the names of those on the subcommittee are those of men long committed to federal compulsory sickness insurance and to federal control of all matters in the health field.

"The American Public Health Association has an obvious right to express itself on any subject related to the public health. The rejection by the majority group of the proposal for consultation with medical and dental leaders indicates the attitude that may be expected of them if they should have control of the Washington bureaucracy that would dominate American medicine should their ideas become effective. Perhaps this step in which these men had leadership will be useful in serving notice once more on the medical, dental, nursing, pharmaceutical and other professional groups as to the nature of the political manipulators in the fields of social security and public health whom the medical professions will be forced to combat."

PHARMACY'S CONTRIBUTION

Declaring the death rate from pneumonia in this war is less than one per cent as compared to 20 per cent in World War I and that "venereal disease may disappear completely," Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, praised the profession of pharmacy as "the most important of the professions that aid medicine in its campaign against pain, suffering, disease and death."

Dr. Fishbein was speaking on a recent (Sept. 21) coast-to-coast broadcast radio program "Stop or Go." He predicted that "miracle remedies now limited by demands of war," will be handled by "proper prescription and dispensing" to control complications that used to cause unnecessary deaths.

"The pharmacist of today has had college education and special education in chemistry, pharmacology, physiology and many other basic sciences," Dr. Fishbein said. "Such great discoveries as the powerful drugs and other remedies used to control disease today demand the height of professional and technical skill for their preparation. I need only mention the marvels that have been accomplished by the sulfonamides, by penicillin, by glandular products, by vitamins, and new nutritional products.

"Right now some 60,000 of our country's doctors and 10,000 of our pharmacists are in the armed forces. Nevertheless, by long hours of devoted work the health of our nation has been kept at a peak even above that reached in time of peace.

"And I can predict with confidence that only the beginning of medicine's and pharmacy's achievements has been approached.

"The supplies of some of our miracle remedies have been limited by the demands of war. When peace comes we will learn what can be done by proper prescription and dispensing of these new powerful forces for the prevention of disease and for the control of some of the serious complications that used to cause unnecessary deaths.

"Then, we may anticipate, the death rate from mastoiditis after infection of the ear will be lowered still further. Peritonitis after abdominal operations will appear less and less frequently. Pneumonia will no longer be feared. The venereal diseases may disappear completely. Through education of the American people about personal and mental hygiene, cleanliness of the body, relaxation of the mind, good nutrition and physical fitness more and more people will live longer and more healthfully.

"I see a bright future for medicine and for pharmacy as two of the greatest professions that exist for the service of mankind. We must return to the high standards of prewar years. Our schools of medicine and pharmacy must be extended and encouraged; young men and young women — of aptitude, with the proper moral standards — must be given the opportunity to qualify in these schools.

"Thus we will go forward to the day in our democracy when every human being may look forward at birth to the seventy years of accomplishment that are the life cycle of the healthful man."

WAXED PAPER FROM CIGARETTE CARTONS USED AS SURGICAL DRESSING

Waxed paper from the wrappers of cigarette cartons can be used to facilitate removal of surgical dressings when the usual nonadherent substances are unavailable. Holes are punched at quarter-inch intervals to permit drainage and irrigation. The waxed papers are washed with soap and water, placed in a shallow pan, wrapped like other surgical dressings and then sterilized in the usual manner.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

THE WELL CHILD CONFERENCE

ITS PLACE IN THE PUBLIC HEALTH PROGRAM

PAUL R. ENSIGN, M.D.

Atlanta

*Pediatric Consultant, Division of Maternal and
Child Health, Georgia Department of
Public Health*

What is a "Well Child Conference"? It is just what the name implies, a conference concerning the health of apparently well children. The term "conference" instead of "clinic" is used because, although everything from beauty parlors to garages have been called clinics, the author prefers to revert to Webster and reserve the term for places where medical treatment is given. Since the purpose of the well child conference is education rather than treatment, the term "conference" is preferred.

The well child conference became an integral part of the public health program through a natural process of evolution. Public health programs were originally established for the purpose of preventing epidemics of typhoid fever, yellow fever, typhus fever, cholera and other infectious diseases. The only effective form of control of these and allied diseases was found to be *prevention* through sanitation, immunization, etc. Thus "preventive medicine" and "public health" gradually became synonymous terms.

In order to determine the effectiveness of control measures, the public health physician turned to vital statistics. His study of such statistics was very revealing. It was particularly valuable in disclosing the relative formidability of the foes he was fighting. He noted, for example, that while the death rate from typhoid was 120 per 100,000 population, the infant mortality rate was 120 per 1,000 population. The death rate among infants was startlingly high. What could be done to reduce these deaths? Was it not a public health problem?

In any country a decreasing population is a public problem. This has been graphically demonstrated in European countries recently. The birth rate decrease in America, even with the temporary wartime rise, is exceeding all previous estimates. The solution to the problem, at least in part, seemed to be the elimination of the unbelievable waste of life evidenced by the high infant death rate. A high mortality rate is definitely a health problem. A decreasing population is certainly a public problem. Thus high infant mortality is both a public problem and a health problem; in other words, a public health problem.

Attempts were made by a few far-sighted per-

sons, both physicians and laity, to solve the problem years ago. By 1909 there was sufficient interest to cause Theodore Roosevelt to call the first White House Conference. As a result, the Children's Bureau was created in 1912.

In an effort to devise an effective life-saving program for infants, scientific help was solicited from those practicing pediatrics. The answer from pediatricians was that preventive medicine should be practiced on well children; indeed, preventive medicine should be given to prenatal cases in order to assure the birth of a healthy child. A healthy, well-nourished child is far less likely to succumb to infectious diseases in early childhood. Consequently, such health protection would inevitably result in lowered infant mortality.

If every mother would take her child regularly to her private physician and follow his advice, the problem of preventive medicine for infants would be well on its way to solution. Until recent years about 90 per cent of the mothers did not take their children regularly to see a physician. Many mothers do not take well babies to physicians in an attempt to *keep* them well. It is not because the mother is not anxious to guard her child's health, but because she has not been taught that regular medical supervision is the surest way to keep the baby from being sick, or that the cost of such supervision is much less than the cost of illness.

Omnibus Ferrarius, in 1604, pointed out that the education of the mother was fundamental in the care of the child. It has also been said that, "While it is well recognized that the health of the individual child is the responsibility of his parents, parents must have an understanding of the fundamentals of child health in order to discharge that responsibility." Many mothers have no way of securing needed information concerning child care unless organized community resources make it available to them.

Fundamentally then, the well child conference is a community resource for the education of the mother to enable her to discharge her responsibility for keeping her child well. The mother is not usually taught in school to care for a baby or that her baby should have regular medical supervision. If she is taught the knowledge is probably forgotten before she needs to make use of it. The proper time for education in child care seems to be at the time she has the baby.

No sick babies should be seen at well child conferences because they present a two-fold threat to the effectiveness of the conferences; viz: 1. Well babies would be brought into contact with sick babies and exposed to communicable diseases needlessly; 2. The mother would not be educated as to her responsibility to her

child, inasmuch as she knows that she should take her sick infant to a physician. If the sick child is treated at the conference, the conference, instead of teaching the mother her responsibility for her child, is showing her how she may evade this duty and make someone else responsible for keeping her child healthy. If a sick child comes to a well child conference, therefore, he should be immediately referred to the family physician.

Obviously, the practicing physician cannot go from patient to patient or from house to house advising mothers to take their infants to a physician for regular medical supervision. If public health services can demonstrate to mothers the value of regular medical supervision so effectively that they will take their children to their physicians regularly, its task will have been accomplished.

Since the basic principle of the well child conference is the education of mothers, the well child conference is truly a public health function for the entire public and should not be limited to the indigent. The service should be available to all who need the education, just as the first grade in school is open to all who cannot read or write. It is an organized community service to help give the mother the instruction and information she needs. When she has learned the value of regular medical supervision, she no longer needs the services of the well child conference any more than a second grade child needs first grade instruction. The best public health program is possible in a community where there are fewest indigent and the majority of patients have private physicians.

Some localities consider it a good policy to add other functions to the underlying one of education of the mother in the well child conference. These additional duties vary widely according to locality and should be optional, depending upon both the need that exists and the recommendations of physicians practicing in the locality. Any function, other than education, that the well child conference is to perform should be decided upon at a meeting of the local medical society prior to the establishment of the well child conference.

One function widely delegated to well child conferences in Georgia is immunization. The advisability of immunizations during the first year of life is recognized by all. Since this is true, most well child conference activities include immunizations. When immunizations are not given at the conferences, it is part of the educational program to remind the mother to take her child to the family physician at the proper intervals for immunizations. The mother is again reminded by the public health nurse at the follow-up home visit and again at the next monthly conference if the child has not been immunized. In some localities only the indigent are immunized at well child conferences and the other children are sent to their physicians. There are many

gradations and variations of the functions of well child conferences.

In some areas physicians have indicated they would give regular medical supervision to all children referred to them by the well child conferences. On the other hand, it has been the desire of some physicians in rural areas that the well child conferences continue the medical supervision of all well children because they are kept busy attending sick patients. In other areas physicians have requested that well child conferences render this service for indigent children only. Here again there are gradations between these plans.

Another function that the well child conferences have come to perform is that of assisting the physicians in keeping abreast of new developments in the care and feeding of well children. This knowledge can be and is used in their private practice to the advantage of themselves, their patients and the public. Also, public health personnel visiting the various conferences gain knowledge from the physicians holding the conferences which they can pass on to personnel in other conferences.

To summarize the place of the well child conference in the general public health program, it may be said that:

1. High infant mortality rates constitute a public health problem.
2. These rates can be lowered by regular medical supervision of the well child and scientific application of pediatric principles.
3. The health of the individual child, including the provision of regular medical supervision, is the responsibility of the parents.
4. Many parents have no way of learning the fundamentals of child care unless they obtain this knowledge through an organized community effort.
5. The sine qua non of the well child conference is that it is an organized community resource designed to educate mothers in the proper care of their children.
6. Since the well child conference is educational in character, it should be limited not by color or economic need but by need for the education only.
7. Other functions are often assigned to well child conferences in various communities.
8. An exchange of ideas between public health personnel visiting the conferences and the physicians holding them stimulates the interest of both groups and is of mutual benefit in helping them keep abreast of new developments in the care and feeding of well children.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

GEORGIA STATE NURSES' ASSOCIATION : OFFICERS—1943-44

President—Lillian O. Nelson, Atlanta.

First Vice-President—Sister Mary Cornile, Atlanta.

Second Vice-President—Vera Mingledorff, Griffin.

Secretary—Mrs. Esther Watts, Columbus.

Treasurer—Jane Van De Vrede, Smyrna.

Chairman, Private Duty Section, G.S.N.A.—Mrs. Lillie W. Goodrum Geeslin, Atlanta.

President—Georgia League of Nursing Education, Ruth Babin, Atlanta.

President—Georgia State Organization for Public Health Nursing, Mrs. Gladys Lilly Garland, Atlanta.

Chairman—State Nursing Council for War Service, Frieda Grefe, Savannah.

Executive Secretary and Chairman—Procurement and Assignment Committee, State Nursing Council for War Service, Mrs. Mildred B. Pryse; headquarters, 131 Forrest Ave., N. E., Atlanta. Phone Walnut 8911; residence, Main 7428.

Executive Secretary—Mrs. Durice Dickerson Hanson; headquarters 131 Forrest Ave., N. E., Atlanta; phone Walnut 8911; residence, Jackson 7979.

ANNOUNCEMENT OF ANNUAL MEETING

The 38th Annual Session of Georgia State Nurses' Association and Private Duty Section; 18th Annual Meeting of the Georgia State League of Nursing Education; 19th Annual Meeting of the State Organization for Public Health Nursing and her Industrial Nurses' Section; and the 4th Annual Meeting of the State Nursing Council for War Service will be held on Dec. 4-5, 1944, in Atlanta, at the First Methodist Church.

The great need for nursing service in both military and civilian programs makes it extremely necessary for nursing groups to get together and learn the *Facts About Nursing in 1944*; also to plan ways and means of better programs of basic education and for better distribution of nursing service.

The following program has been outlined. All program meetings will be open to the public:

PROGRAM — DEC. 4-5, 1944

Local Arrangements Committee

Lucy I. Mace, Chairman.

Carolyn Adkins, Co-Chairman.

Mrs. Mildred Pryse, State Nursing Council for War Service.

Information—To be appointed.

Registration—Mrs. Elizabeth Dixon, Chairman; Mrs. Myra Suhr.

Publicity—Mrs. Durice Dickerson Hanson, Mrs. Mildred Pryse, Mrs. Gordon Carrigan.

American Journal of Nursing—Ruth Bryce.

Public Health Nursing Magazine—Eunice Chapman.

Industrial Nurses' Luncheon—Flo Beck.

Announcements

Please make hotel reservations immediately, or at least two weeks in advance. Hotels will be crowded, hence nurses are requested to room together. All meetings are scheduled to be held at the First Methodist Church, unless otherwise announced. Watch bulletin board for specific meeting rooms.

Registration Hours

Fee \$1.00 — Bring 1944 A. N. A. membership card for use in registering and voting. Monday, December 4: 4-6 P.M.; Tuesday, December 5: 8 A.M. - 2 P.M. All nursing groups have the same registration hours as listed above.

Voting Hours

Thursday, December 7, 11 A.M.-2 P.M. G. S. O. P. H. N. (vote by mail or at meeting). All nursing groups have same voting hours as listed above.

MONDAY, DEC. 4, 1944

1 - 3 P.M.—Executive Board G. S. N. A. at State Headquarters.

3 P.M.—Executive Committee, State Nursing Council for War Service.

8 P.M.—State Nursing Council for War Service Program — Rally (Open to Public).

Speakers: Lucile Petry, Director Division of Nurse Education, U. S. P. H. S., Washington, D. C. Mrs. Frances Payne Bolton, Congresswoman from Ohio.

Chorus: U. S. Cadet Nurses.

TUESDAY, DEC. 5, 1944

9 - 10 A.M.—Section Business Sessions.

10 A.M. - 12 Noon—Business Session G. S. N. A. 12:30 - 2 P.M.—Industrial Nurses' Section

Luncheon—Parlor B, Henry Grady Hotel. Open Meeting, Speaker.

2 - 3 P.M.—Section Business Sessions, G. L. N. E.; G. S. O. P. H. N., Private Duty Section G. S. N. A., and Industrial Nurses Section.

3 - 4 P.M.—Program — Sponsored by G. S. O. P. H. N.

Dr. Rufus Floyd Payne, Fulton County Health Director, "Georgia's Health Panel." (Open Session).

4:15 - 5:45 P.M.—Continued Business Session G. S. N. A.

7:30 - 8:30 P.M.—New Executive Board Meetings — Biltmore Hotel.

8:30 - 10 P.M.—New G. S. N. A. Executive Board Meeting — Biltmore Hotel.

To those who are concerned with post-war planning, the following facts will be of special interest; they suggest trends:

Approximately 208,000 registered nurses are serving civilians in this country. Another 48,000 are in military service; of these nearly 23,000 are overseas. Departments of the Federal Government, exclusive of the Army and Navy, employed over 6,500 nurses in 1943, and the employment of over 7,500 has been authorized for the fiscal year.

(Continued on page 350)

WOMAN'S AUXILIARY : OFFICERS 1944-45

President—Mrs. W. T. Randolph, Winder.

President-Elect—Mrs. Lucius N. Todd, R. F. D. No. 2, Augusta.

First Vice-President—Mrs. Edgar H. Greene, 1442 Wesley Road, Atlanta.

Second Vice-President—Mrs. L. W. Williams, 135 East 45th St., Savannah.

Third Vice-President—Mrs. Leonard Massengale, Lumpkin.

Recording Secretary—Mrs. Charles Usher, 6 East Liberty St., Savannah.

Corresponding Secretary—Mrs. Alex Russell, Winder.

Treasurer—Mrs. Ralph Fowler, Marietta.

Historian—Mrs. W. W. Puett, Norcross.

Parliamentarian—Mrs. Lee Howard, 625 East 44th St., Savannah.

Press and Publicity—Mrs. Charles Daniel, College Park.

MEDICAL AUXILIARY NEWS EIGHTH DISTRICT MEDICAL SOCIETY

Mrs. Lucius N. Todd, president-elect of the Woman's Auxiliary to the Medical Association of Georgia, spoke to the women of the Eighth District Medical Society at their meeting in Waycross recently, which was held in the First Methodist Educational Building. Mrs. Todd spoke on "Why the Woman's Auxiliary?" She stressed the role that doctors' wives should play (1) following the trends toward socialized medicine and meeting the situations intelligently; (2) participating in projects of public health; and (3) encouraging the spirit of fraternity among the men of medicine and their wives on the basis of their common interests.

Another featured speaker of the occasion was Dr. Ralph Chaney, of Augusta, president-elect of the Medical Association of Georgia, who pointed out two anticipated post-war exigencies that will require the concerted efforts of medical men in order to reach a satisfactory solution. They will be (1) the necessity of absorption by the profession of medical men now in the armed services and (2) active participation in influencing legislation which will protect the profession as well as the best interests of the public to be served.

Mrs. T. V. Willis of Brunswick presided over the business session. Officers elected for the ensuing year are:

President—Mrs. T. V. Willis, Brunswick.

Vice-President—Mrs. J. R. Gay, Waycross.

Secretary-Treasurer—Mrs. J. W. Simmons, Brunswick.

On the program was Mrs. J. E. Penland, vocalist, who was accompanied by Mrs. DeCarr Sims in rendering two delightful solos. Following adjournment the women were joined in the church parlor by the men of the Eighth District Medical Society. There Mrs. Kenneth McCullough presided over a tea table which was adorned with colorful flowers and held delicious refreshments for the assembled guests.

GEORGIA MEDICAL SOCIETY AUXILIARY

The Auxiliary to the Georgia Medical Society met at the home of Mrs. Ralston Lattimore in Savannah recently. The meeting was called to order by the president, Mrs. S. Elliott Wilson. Mrs. H. M. Kandel, chairman of programs, presented the following tentative plans for the current year:

October—Program time devoted to hospitality.
November—Legislation affecting the practice of medicine.

January—What kind of Sex Information?

February—Hygeia: report of research chairman.

April—Annual meeting and reports.

Reports were heard from Mrs. L. W. Williams, treasurer; Mrs. Charles Usher, chairman of Finance and Budget; and Mrs. J. E. Porter, Christmas Club chairman. Mrs. S. Elliott Wilson announced that Dr. Lee Howard is to be the advisor to the auxiliary again this year. A letter was read from Mrs. R. V. Martin, chairman of Growth and Development Committee, asking that the Auxiliary be represented at the October meeting to be held at Health Center.

Mrs. Charles R. Rayburn, from Hunter Field, was present and introduced to the Auxiliary Mrs. Paul K. French, Mrs. J. C. Pickett and Mrs. Harry R. Newman, also from the field.

The next meeting will be held at the home of Mrs. J. K. Quattlebaum in November.

FULTON COUNTY MEDICAL SOCIETY AUXILIARY

Fulton County Medical Society Auxiliary officers and chairmen for the year are:

President-Elect—Mrs. D. R. Longino.

First Vice-President—Mrs. Shelley Davis.

Second Vice-President—Mrs. D. T. Heyser.

Third Vice-President—Mrs. T. I. Willingham.

Recording Secretary—Mrs. Cliff Sauls.

Historian—Mrs. Clifton Kemper.

Treasurer—Mrs. Malcolm Neel.

Corresponding Secretary—Mrs. Kells Boland.

Auditor—Mrs. Jos. Yampolsky.

Parliamentarian—Mrs. O. H. Matthews.

Other members appointed include Mrs. Stephen Brown, chairman, hospitals; Mrs. O. H. Matthews, house and grounds; Mrs. Murdock Euen, entertainment; Mrs. Stacey Howell, budget; Mrs. Hal Davison, ways and means; Mrs. T. L. Tidmore, courtesy and hospitality; Mrs. Homer Maulding, telephone; Mrs. W. W. Anderson, decorations; Mrs. Jeff Richardson, health and visual education; Mrs. Clifton G. Kemper, publicity; Mrs. T. I. Willingham, hygeia; Mrs. Marion Pruitt, remembrance; Mrs. O. D. Hall, cancer; Mrs. Edgar H. Greene, legislation and citizenship; Mrs. Clifford Eskey, public relations; Mrs. Charles Daniel, yearbook; Mrs. G. F. Spearman, scrapbook; Mrs. B. L. Shackleford, Doctors'

Day; Mrs. Allen H. Bunce, romance of the research of medicine; Mrs. McClaren Johnson, Jane Todd Crawford Memorial; Mrs. Don Cathcart, luncheons; Mrs. Olin Cofer, Doctors' Aide Corps; Mrs. S. L. Morris, bloodtype registry; Mrs. John Funke, Red Cross surgical dressings; Mrs. Eustace Allen, Red Cross classes; Mrs. James N. Brawner, senior cadet nurse registry.

Mrs. David W. Thomas, president of the Woman's Auxiliary to the American Medical Association, has issued the following interesting message to Auxiliary members:

"Today the medical profession is confronted with many problems, and keeping in touch with these problems is like a motion picture with a panorama of constantly changing scenery. Physicians' wives are expected to keep up with the advance of medicine or at least to keep within hailing distance, and we can best accomplish this through the Woman's Auxiliary. By pledging our support to the profession and our endeavors to be useful, we help paint this picture.

"Health education will play an important role in our plans for the year. We wish to accomplish a constructive program by acquainting ourselves with public health and educational subjects, passing accurate and valuable information to other clubs and organizations, and continuing to keep ourselves well informed in all matters pertaining to medical problems, furthering the health programs and transcribed radio talks in the schools, and studying the plans of the National Committee for Physical Fitness."

DURICE DICKERSON IS WED TO JAMES BUTLAR HANSON

(Continued from page 348)

The marriage of Miss Durice Dickerson, daughter of Mr. and Mrs. John William Dickerson, of Greenville, S. C., to James Butlar Hanson, son of the late Mr. and Mrs. James Frank Hanson of Atlanta, was solemnized October 3 at 3 P.M., with the Reverend Peter Manning officiating at the Inman Park Methodist Church.

Acting as matrons of honor were Mrs. James McCoy Dickerson of Greenville, S. C., sister-in-law of the bride, and Mrs. F. Caswell Bush, of Atlanta, sister of the bridegroom. Mrs. Norman Aaron, niece of the bridegroom, rendered music for the occasion. Mr. James McCoy Dickerson, brother of the bride, was best man for the bridegroom.

The bride was gowned in a tailored suit of green with hat and veil to match and wore brown accessories. She wore a corsage of yellow rosebuds and tuberose.

Mrs. Hanson is a graduate of Grady Hospital School of Nursing and attended school at the University of Georgia Evening College, Vanderbilt University, and the University of Chicago. She is the Executive Secretary of the Georgia

State Nurses' Association. Mrs. Hanson's brothers are Earl Floyd Dickerson of Charleston, S. C., Emory O. Dickerson and James McCoy Dickerson of Greenville, S. C.

Mr. Hanson is a graduate of Emory University and a member of Kappa Phi Kappa fraternity. He is associated with the Fulton County Juvenile Court. Mr. Hanson is a member of the American Legion Lodge No. 1 in Atlanta, and a 32nd Degree Mason. His brother is Frank Hanson, and his sister, Mrs. F. Caswell Bush.

Out-of-town guests at the wedding included Mr. and Mrs. James McCoy Dickerson and son, Ronald McCoy Dickerson; Mrs. Ella Murphy, Mrs. Nell Neely and daughter, Iris, all of Greenville, S. C.

Mr. and Mrs. Hanson will reside in Atlanta at the Ridley Court Apartments, 131 Forrest Avenue, N. E. They have a host of friends throughout the State who will be interested in learning of this marriage.

MAINTAINING ADEQUATE NURSING SERVICE IN THE SMALL HOSPITAL

Hospitals must decide, as a matter of policy and not of expediency, what type of nursing service they are to offer patients — whether it is to be all graduate nurses, graduates and students, or graduates and attendants. Of course, due to the present wartime shortage, they in many cases find it necessary to employ all and any types of nursing service.

Local newspapers have proved to be the most successful means of attracting former nurses back into service of new attendants, and nurses' bureaus are useful in acquainting unemployed and private duty nurses with hospitals' serious need. Employment agencies are not helpful in this matter. Other hospitals all have the same need and therefore have no surplus, and graduates of the few nursing schools usually have made plans for advanced study, specialization, remaining in their training hospitals, or joining the armed forces, and thus are not available for service in small hospitals.

In order to attract attendants or nurses, hospitals must pay adequate salaries, preferably in cash, and must offer an opportunity for increases both in salaries and responsibility. Hospital administration must see to it that interest in the hospital is created and maintained by keeping the employees informed, and by telling them frequently how essential they are and how much the hospital depends on them. Proper initial job instruction with subsequent supervision is likewise of greatest importance.

THE RE-EVALUATION OF MEDICAL RECORDS

If the hospital is to be held responsible for the results of its services, as it must at all times, it must have records which can be analyzed to show that through use of its facilities its staff is practicing as good medicine as it should. It must have on record the immediate results obtained, how and why these results occurred, how much and what quality work is being and has been accomplished.

The matter of the prosecution of medical research through availability of case records for review and study, and the question of the need of the record for legal protection are, of course, of prime concern to the hospital. Thus, in order to re-evaluate medical hospital records, it is necessary that they first be evaluated. The hospital must determine what their value is supposed to be, why the records were originally made, what they were intended to accomplish, and whether they are of more or less value than intended.

Records must be of value to three groups, singly and collectively—to the patients, to the hospital, and to the physicians. They are one of the minimum requirements for approval of a hospital by the American College of Surgeons. They must be accurate and complete, despite the pressure of wartime situations, though experience has proven that in different cases different factors should be emphasized. However, a report must always give sufficient detail to justify the diagnosis made and warrant the treatment ordered.

Now, while physicians are leaving civilian practice to join the armed services, records are important to instruct the new doctor on the case and refresh the knowledge of the original physician when he returns to his practice.

NEW ARMY BULLETIN ON GONORRHEA

Penicillin is the drug of choice in the treatment of gonorrhea, according to a new War Department bulletin. The use of sulfonamides, it says, will be limited to those cases not responding to adequate penicillin therapy and those instances in which penicillin is not available through normal supply channels. However, it is particularly important, the bulletin warns, that patients with gonorrhea treated by penicillin be carefully followed with respect to the possible development of primary and secondary syphilis which may be retarded or masked by the penicillin therapy.

IMMUNIZATION VIRTUALLY ELIMINATED TETANUS IN ARMED FORCES

Tetanus has been virtually eliminated from our armed forces as a result of compulsory immunization. Major General Norman T. Kirk, Surgeon General of the Army, says that not a single case has been reported among completely vaccinated troops and there has been only a handful of cases throughout the entire Army. These occurred prior to vaccination or before the immunization process had been completed. The Navy, which also requires tetanus immunization, has had no cases of the disease among sailors or Marines wounded in combat up to Sept. 15, 1944, according to the Navy Bureau of Medicine and Surgery.

The most recent account illustrating the value of tetanus immunization was given in the report of a Navy medical officer who served aboard a hospital ship on which 284 Japanese and 384 Americans, all wounded in the same engagement, were being treated. Fourteen cases of tetanus, ten of which were fatal, occurred among the Japanese. None of the Americans developed the disease. Army medical records indicate that the Japanese do not immunize actively against tetanus.

PENICILLIN FOR SYPHILIS IN PREGNANCY

Preliminary observations indicate that penicillin has a definitely good effect both on the mother and on the child in syphilis in pregnancy and on infants who were born with the disease. J. W. Lentz, M.D.; Norman R. Ingraham, Jr., M.D.; Herman Beerman, M.D., and John H. Stokes, M.D., Philadelphia, report in *The Journal of the American Medical Association* for October 14.

They point out that the treatment of the pregnant syphilitic women and of the infants who acquired the disease prior to birth with weekly injections of neoarsphenamine and mapharsen supplemented by a bismuth preparation, "although eminently satisfactory from the standpoint of both preventive and curative medicine, still has several aspects in which improvement may be expected. . . ."

The authors believe it encouraging that among the women treated by them not a single stillbirth or neonatal death has occurred, whereas untreated pregnant women with early syphilis almost uniformly give birth to dead or diseased children. They emphasize, however, that the period of observation of the cases has not been long enough to be certain of the permanent effects of the treatment. The four physicians also report encouraging results in their treatment of congenital syphilis.

RED CROSS SHIPS PENICILLIN BY AIR FOR PRISONERS OF WAR IN GERMANY

On the basis of recommendations by medical officers recently repatriated from German prison camps and hospitals, the American Red Cross has sent 5,000 tubes of penicillin by air express to the International Red Cross Committee in Geneva to be used for American prisoners of war held by Germany, it has been announced.

The Red Cross plans additional shipments of medicines and medical supplies for prisoners of war in the light of the repatriates' reports. The International Committee has been asked to keep the prison camp leaders informed of the medicines available in the stocks held in Geneva for their use, and to suggest that the leaders not allow camp stocks to become depleted before re-ordering.

Regular shipments of Red Cross first aid kits for use when doctors are not available have been made to the prison camps in Germany. Bulk shipments of medicines and medical supplies also have been made to supplement those provided by German military authorities for the care of sick and wounded prisoners of war.

ORGANIZATION OF VOLUNTEER SERVICE FOR HOSPITALS

The organization of volunteer service under the supervision of a salaried director is recommended for all hospitals who use or hope to use volunteer workers. The responsibility of the director is to know where in the hospital volunteers are needed, what jobs they are to undertake, how long they will be needed.

The director should deal with and be responsible for the volunteer. Where the volunteer will best fit, what her hours are to be, how and by whom she will be trained are decisions to be made by the director. By her, too, are issued any rules and regulations applying to volun-

teers. From the director likewise should come frequent recognition of the valuable services performed by the volunteers.

The most satisfactory arrangement for ascertaining that the volunteer will be useful to the hospital and satisfied with her work there is to place her on a month's probation period when she first comes to work. At the end of this time, the director may decide to place her in another department, or the volunteer may request the transfer, or she may be judged incapable of performing any work for the hospital. At this beginning of her service is the time to discover any maladjustment, not after the hospital staff has wasted precious time.

The position of the director of volunteers could be a part-time or volunteer job if the hospital were very small. However, in any large hospital it is a full-time position, one requiring an intimate knowledge of the hospital, as well as a high degree of personality and intelligence. Further, volunteers prefer working under a hospital staff member to working for another volunteer.

Accurate office records of names, addresses, phone numbers, assignments, hours worked, absences, experience, etc., must be kept on file.

PATENTED ITEMS FOR THE PHARMACOPOEIA

The Scope policy of the U. S. Pharmacopoeia for many years has been to exclude products which are secret in composition, but to give recognition to non-secret substances which are patented or trademarked where, in the judgment of the Subcommittee on Scope, these meet the standards for therapeutic usefulness established for the Pharmacopoeia. The policy followed by the Pharmacopoeia in such cases is to announce publicly such items as are recommended for admission by the Subcommittee on Scope and to invite the owners of such products to review the proposed U.S.P. monographs and offer criticisms and suggestions. In the opinion of the U.S.P. Board of Trustees, Pharmacopoeial recognition does not in any way affect any trademark or patent rights granted the owners under U. S. trade mark or patent laws.

The U.S.P. Board of Trustees has also followed the policy of advising the Revision Committee that controlled products which have been approved for U.S.P. admission by the Subcommittee on Scope should not be included in the Pharmacopoeia when the owner or owners so request. The effect of this policy is illustrated by the action of the Revision Committee in omitting Amphetamine (Benzedrine) from the U.S.P. XII, even though its admission was recommended by the Subcommittee on Scope, because the firm controlling the patents asked that it be excluded. The Subcommittee on Scope has again recommended the admission of Amphetamine in the forthcoming U.S.P. XIII but it will not be included if those controlling the patents disapprove.

MARKED PROGRESS IN CURBING HOMICIDE

Despite the general increase in lawlessness reported in many sections of the country during the war period, the death rate from homicide has been steadily declining. But this drop in mortality is not merely a wartime phe-

nomenon; the homicide record of the United States has been improving without interruption for more than a decade. The death rate from this cause fell from 9.7 per 100,000 population in 1933, when nationwide data first became available, to 5.8 in 1942, a decline of about 40 per cent. More recent data have not yet been released for the country as a whole, but reports from various sources, including the experience among the many millions of Metropolitan Industrial policyholders, indicate that the homicide situation has continued to improve since 1942. It is quite likely that the current rate is the lowest ever experienced in this country.

The downward trend of the homicide rate since 1933 has been nationwide, every State but Connecticut and North Dakota showing a decrease. In no less than 41 States (including the District of Columbia), the decline amounted to 25 per cent or more between 1933-1934 and 1941-1942; in 12 States the decrease was 50 per cent or more. Arranged according to magnitude of relative decline, the banner States were: New Hampshire, with a decrease of 86 per cent; Colorado and South Dakota, with a drop of 60 per cent each; Illinois, Missouri, Washington, District of Columbia, Iowa, Idaho, Wyoming, Indiana, and Oklahoma, with declines ranging from 55 to 50 per cent. Unfortunately, the States with the worst homicide records are virtually without representation on this honor list. There are, however, some States in which the homicide rate is well above the national average and which have shown marked reductions in mortality. These are Kentucky, Tennessee, Alabama, Arkansas, Louisiana, and Texas, with rates not far from double the average, and with declines amounting to between 38 and 48 per cent.

White persons made relatively twice as much progress as the colored in reducing the homicide rate in the decade. The toll for the white was cut by about one-half and for the colored by about one-quarter. As a result of this difference, the disparity in the homicide rates between the two groups has been widened.

The general reduction in murder and manslaughter in this country may be attributed to a number of factors. There is reason to believe that the tightening of restrictions on the sale and possession of firearms has had a salutary effect. Thus, in 1933 firearms accounted for 65 per cent of the homicides in the United States, but by 1942 the proportion had decreased to 54 per cent. Law enforcement agencies—Federal, State, and local—have, in general, been functioning more efficiently in combating the criminal element in our population. The Federal Bureau of Investigation deserves special mention for its effective attack on racketeers and gangsters. But this is by no means the whole story, or even the major part of it. Professional criminals, studies show, are responsible for a fairly small proportion of the homicides. A majority of such killings arise over petty disputes and quarrels or from jealousy or thwarted love.

It is probable that improvements in social conditions have played their part. The clearance of slum areas, which frequently breed lawlessness, and increased facilities for wholesome recreation, must have had some effect.

MOTOR VEHICLE FATALITIES UP IN 1944

As our country approaches the time when civilian activities will be freed of the restrictions placed upon them by the demands of war, students of highway safety watch closely, and not a little apprehensively, said the *Statistical Bulletin* of the Metropolitan Life Insurance Company for August 1944, the trend of motor vehicle accidents. "The decline in the number of deaths in accidents of this kind from around 40,000 in 1941 to 28,000 in 1942, and further to 23,000 in 1943, resulted very largely, if not entirely, from a decrease in the use of automobiles. As a matter of fact, in the present emergency, the number of motor vehicle deaths showed the largest drop from prewar levels when restrictions on pleasure driving were tightest—that is, in the summer of 1943. Even the slight relaxation of the curbs late last year was soon followed by a sizeable increase in the motor vehicle death toll. When all the bars are let down after the war, the ensuing rise in motor travel will undoubtedly bring us back to the high prewar death totals, unless law enforcement agencies are greatly strengthened and educational activities are expanded and made effective in bringing about a fundamental change in the attitude of the American people to this annual massacre.

"Two factors distinguish the accident situation today from that of preceding years. In the first place, an unusually large proportion of the cars on the road are in poor condition because of their age and because of the difficulties in having repairs made and parts replaced. A second factor is the poorer condition of the roads. Conceivably these drawbacks may result in boosting the fatality toll for some time to come above what might be expected from the increase in driving. Opinions naturally will differ on the probable effect of these conditions. Some may contend that less efficient cars and poorer roadways will cause drivers to decrease speed of driving and to be more cautious in other ways. There is ground for this belief in the fact that the toll continued to mount up to 1941 despite the vast improvement in cars and highways. Whatever may

be our opinions on this point, it is obvious that our safety program should stress the potential dangers of poor equipment and roadways. Drivers should have impressed upon them that the need for caution is greater than ever, and at the same time every effort should be made to build safety into new and existing highways.

"Statistics now available are not sufficiently complete to show what effect defective cars and roads are likely to have. Data are at hand, however, on the types of motor vehicle accidents occurring among the many millions of Industrial policyholders of the Metropolitan Life Insurance Company in the first six months of 1944, and these are of interest in the present situation. They indicate broadly that the increase in motor vehicle fatalities this year is following the pattern that might have been expected from past experience, the greatest increases occurring in those types of accidents which had declined most rapidly since 1941. Motor vehicle fatalities among passengers and drivers had declined more sharply than among pedestrians.

"Each month from November 1943 to June 1944, the death rate from motor vehicle accidents among these Industrial policyholders ran higher than for the corresponding month in the preceding year. For the first half of 1944 the death rate was 14 per 100,000, or about what it had been in 1925, and 22 per cent above the rate in the first six months of 1943. It should be noted, however, that the rate for January to June this year is still 26 per cent below the rate for the corresponding period of 1941.

"From the accompanying table it will be seen that the rise in the death rate among pedestrians between 1943 and 1944 was only 6 per cent, whereas the rate for accidents in which two automobiles collided rose 36 per cent. Fatalities in which a motor vehicle collided with a fixed object were up 75 per cent, and those in noncollision accidents were up 33 per cent. It would be expected, of course, that a greater reduction in the death rate would occur among occupants of automobiles than among pedestrians. A greater number of cars on the road would naturally tend to

increase the chances of vehicles colliding with each other more than the chances of vehicles striking pedestrians, since there has been no material change in the number of the latter. No explanation is readily available for the large increase of 75 per cent in the death rate from collisions between automobiles and fixed objects. Accidents of this kind had not declined to as great an extent as had deaths in collisions between automobiles.

"It is of more than passing interest that the death rate in automobile-motorcycle accidents has actually been lower this year than last, and that there has been no change in the death rate from motor vehicle-bicycle accidents. The marked revival in the popularity of the bicycle in the years just before the war was accompanied by a sharp rise in the number of persons killed in automobile-bicycle collisions. More than 900 bicyclists lost their lives in such accidents in the United States in 1941. The drop in bicyclist deaths was considerable in 1942 and also in 1943, with the result that in the latter year the number of bicyclist fatalities was only about half what it had been in 1941."

MOTOR VEHICLE ACCIDENT DEATH RATES PER 100,000 PERSONS, BY TYPE OF ACCIDENT. AGES 1 TO 74 YEARS. WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS. METROPOLITAN LIFE INSURANCE COMPANY. JANUARY-JUNE 1944 AND 1943 COMPARED.

Type of Accident	1944	1943	Per Cent Change
MOTOR VEHICLE (TOTAL)	14.2	11.6	+ 22.4
Collision with pedestrian.....	6.8	6.4	+ 6.3
Collision with vehicle:			
Railroad train .....	.8	.7	+ 14.3
Streetcar .....	.2	.1	+100.0
Other automobile	1.9	1.4	+ 35.7
Motorcycle .....	.1	.2	- 50.0
Bicycle .....	.2	.2	.....
Other vehicle .....	*	*	.....
Collision with fixed object.....	1.4	.8	+ 75.0
Noncollision accident	1.6	1.2	+ 33.3
Type of accident not specified	1.2	.7	+ 71.4

*Less than 0.05 per 100,000.

FIND GONORRHEA CAN BE CURED AS EASY IN WOMEN AS IN MEN

The cure of gonorrhea with sulfonamide compounds and penicillin is as easy in women as in men, despite widespread beliefs to the contrary, Ruth Boring Thomas, M.D.; William E. Graham, M.D., and George R. Cannefax, of the U. S. Public Health Service Medical Center, Hot Springs, Ark., report in *The Journal of the American Medical Association* for November 4 as a result of studies carried out at their institution.

In 200 Negro women 90 per cent passed the tests of cure after one course of treatment, chiefly with sulfathiazole, and 95 per cent after two courses. In 355 white women 60 per cent passed tests of cure after one course of treatment and 70 per cent after two courses.

"These results," the three investigators say, "correspond closely to those recently reported with both Negro and white men in the Army. The evidence presented here indicates that under controlled conditions the bacteriologic cure of gonorrhea with sulfonamide compounds is as readily brought about in women as in men. This is true also for penicillin."

The authors point out that although the number of women with gonorrhea who have been treated with sulfonamides may run into the millions there have been few reports of results in groups of patients under proper treatment control. Their present report deals with women domiciled in an institution during the entire course of treatment and who were not released until tests indicated they were cured.

Another important finding was that the Negro is easier to cure of gonorrhea than a white person. This concurs with other findings. The first course of treatment of five days produced 60 per cent cures among the white women and 90 per cent among the Negroes; after the second course of five days the cures were 27 per cent among the white women and 54 per cent among the Negroes.

"An explanation of the difference in response to sulfonamide therapy between Negro and white patients must await the results of further investigation," the investigators say.

Most of the patients received sulfathiazole. Those found sulfonamide resistant were given other types of treatment. When penicillin became available it was used for these types of cases.

The Medical Association of Georgia will hold its next annual meeting at the City Auditorium, Macon, May 8-11, 1945.

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SURGERY OF THE SPLEEN

LON W. GROVE, M.D.
Atlanta

Physiology

The spleen, while not necessary for the maintenance of life or health under normal conditions, proves to be an organ which under certain pathologic conditions holds the balance between ultimate or immediate life or death. Although one of the most accessible structures from the standpoint of experimental study, little is known conclusively concerning its function.

To attempt any enlightened discussion of the physiology of the spleen, with the experimental work and clinical studies on which such knowledge is based, would require unlimited time and space. It is sufficient to mention the outstanding functions concerning which there is a more or less unanimity of opinion. The spleen serves as a filter for the blood stream, both for bacteria and for debris which results from normal metabolic processes. It is a great reservoir for blood, being able to store as much as one-fifth of the entire volume of the blood in the body and hold it in reserve from the general circulation. The spleen has an important function in the fetus, in the formation of erythrocytes, and in the adult may reassume this function under certain conditions. It is a constant source for the production of lymphocytes. The normal spleen is thought by some to stimulate the bone marrow to erythropoiesis. The spleen serves the body as a clearing house in which old erythrocytes, leukocytes, and blood platelets are phagocytized and destroyed. This destruction of erythrocytes in the spleen gives this organ an important function in the metabolism of bilirubin and in the storage of iron.

The removal of the normal spleen seems to cause no deleterious effect on the individual. Ash-Upmark¹⁰ collected 100 cases in which the normal spleen had been removed; 99 were for trauma. These patients were observed for one to twenty-seven years after splenectomy. He found no increased susceptibility to infection or to malignant tumors, but did note a tendency to rapid exhaustion. He concluded that although the spleen should not be removed except on vital indications, individuals from whom normal spleens had been removed should be accepted for life insurance on the usual terms.

There may be a transient rise in erythrocytes, leukocytes and blood platelets following splenectomy, but as the remaining portion of the reticuloendothelial system compensates for the loss of the spleen the cellular elements of the blood soon return to a normal level. It has been shown by Gordon and Kleinberg¹² that the anemia following splenectomy is no greater than an anemia which follows simple abdominal section, or the removal of any other organ. Splenectomized guinea pigs showed a maximum loss of ability to destroy red cells 25 to 30 days after operation, and this is the time when the increase in red cells and platelets is greatest.

The diseases in which the spleen assumes an apparent role may for convenience be divided into four groups². These are: 1, diseases due to toxic agents or infections; 2, diseases associated with abnormalities of the white cells and related structures; 3, diseases associated with changes in the red cells and blood platelets; 4, a miscellaneous group. Group 1 includes tuberculosis, syphilis, malaria, and biliary cirrhosis. Group 2 includes the leukemias and Hodgkin's disease. In group 3 the more common conditions are splenic anemia or

Banti's disease, thrombocytopenic purpura, hemolytic jaundice, pernicious anemia and polycythemia vera. Group 4 includes tumors of the spleen, ruptured spleens, and a little understood group, such as Gaucher's disease.

In group 1 the pathologic manifestation is a systemic condition and the splenomegaly is only secondary. Splenectomy in this group should be limited to such cases as may show improvement or gain relief from discomfort or possible focus of infection as a result of the removal of a large involved spleen. I have seen one such case. A young woman with pulmonary tuberculosis and secondary involvement of the spleen was completely relieved of pain and discomfort by the removal of a spleen that weighed 2,000 grams. She lived in comfort for two and one-half years before dying of her pulmonary disease.

The diseases falling in group 2 no longer concern the surgeon. It is generally considered that splenectomy in the leukemias is of no permanent value and that the use of the x-ray or radium is of palliative value. The same may be said of Hodgkin's disease.

It is in group 3 that surgery finds its most useful field. The types in this group which are amenable to surgery will be discussed in some detail.

Splenic Anemia or Banti's Disease

This condition is characterized by splenomegaly, secondary anemia, leukopenia, a purpuric tendency, and evidence of portal obstruction, this latter becoming evident later in the disease and manifested by ascites or hemorrhage from the esophagus or both.^{3,4} The etiologic factors are not known. The spleen shows a thickened capsule, with normal splenic tissue replaced by fibrous tissue with obliteration of the veins and sinuses. A collateral circulation is usually well established. It has been shown³ that there is present a portal hypertension, the pressure in the splenic vein being three to four times normal. This fact is given by some authors as evidence that the primary etiologic factor is portal cirrhosis and that splenomegaly is a secondary finding. Against the liver being the site of

the primary disease is the fact that early splenectomy frequently stops the progress of the disease. The diagnosis is usually made by exclusion of other possible causes of splenomegaly. The treatment is splenectomy. Rousselot¹⁷ reported 15 cases of Banti's disease subjected to splenectomy with 2 operative deaths and 3 late deaths from the disease. Ten cases were living ten years after splenectomy and only one of the ten had recurrence of symptoms. Mayo and Griffin,¹⁸ reporting on 184 cases, showed an operative mortality of 9.2 per cent. The mortality among patients less than 40 years of age was only one-half of those above that age. Both immediate and late results were better in the younger group. Of 167 survivors of splenectomy for Banti's disease, 92 were living one to twenty years after operation.

Seven cases of splenic anemia are included in my series. The ages varied from nine to twenty-eight years. All of these patients but one have remained free from symptoms. This patient has had two episodes of bleeding from an esophageal varix and required transfusions. When last seen, two years ago, was still living.

Thrombocytopenic Purpura Hemorrhagica

This is a chronic disease, occurring in mild or severe forms, with acute exacerbations, characterized by a tendency to bleeding from the mucous membranes, subcutaneous hemorrhages, either spontaneous or the result of trifling injuries, and secondary anemia.^{3, 4, 5, 19} Blood studies reveal a marked lowering of the blood platelets below 100,000, a normal clotting time, a prolonged bleeding time, and a delay in or absence of clot retraction. The tourniquet test, or capillary resistance test, is positive.⁶ The spleen, as a rule, is not enlarged or only moderately so. The cause of this condition is not known. It appears that this is a chronic disease, continuous in character, with complete remissions, and with acute exacerbations which may be fulminating and fatal. The remissions may be of short duration or may be permanent as far as bleeding to any degree is concerned. That so many are permanently relieved of the acute symptoms of bleeding and subcu-

taneous hemorrhages, and yet continue to bruise easily, lends support to the idea of a continuous disease which is not cured but in which remissions occur, either spontaneously or as the result of therapy, and these remissions may be permanent.

It is apparent that some unknown element in the body causes a marked reduction in the number of blood platelets, either by destruction or inhibition of production. Also the resistance of the capillary walls to the passage of the elements of the blood is reduced. That the causative factor is related to the reticulo-endothelial system has long been supposed and attention has thereby been focused on the spleen, it being the largest single member of this important system. The interest in the casual relationship of the spleen to purpura was given great impetus in 1916 when Kaznelson⁷ performed the first splenectomy for this disease. A recent report by Troland and Lee⁸ adds to this interest in the spleen as a causal factor. Using acetone extracts of purpuric spleens, they were able to produce severe thrombocytopenia in all experimental animals into which injections of the extract were made. This did not occur when extracts made from normal spleens or other body tissues were used. No bleeding tendency developed in the presence of this experimental thrombocytopenia but only one injection was given in each instance and the platelet counts returned to normal within 36 to 48 hours. The maintenance of thrombocytopenia by repeated injections of the extract over a long period of time may throw further light on this interesting finding. Kracke⁹ is attempting to confirm this work. Torrioli and Puddu¹⁰ in Italy have independently found results similar to those of Troland and Lee.

In view of definite spontaneous remissions in this disease, some apparently permanent, treatment should be conservative and medical therapy should be resorted to before surgery is advised. These medical measures consist of treatment directed against foci of infection, diet, calcium and iron, vitamin therapy, discontinuance of causative drugs, and transfusions in the presence of severe anemia or serious bleed-

ing. The use of snake venom may be tried,²⁰ although recent reports on this form of therapy are not encouraging. Irradiation of the spleen and long bones with the roentgen ray is recommended by some radiologists. The few reports^{21, 22} favoring this form of treatment, however, are not substantiated by other reports whose authors used the same dosage and periods of treatment.

Medical therapy having been exhausted without gaining permanent remission, splenectomy is indicated, and the patient with recurring episodes of bleeding should not too long be denied the benefits of this operation. The results from splenectomy are satisfactory and in many instances spectacular. The rise in the platelet count can be demonstrated in many cases while the patient is still on the operating table. That all patients with thrombocytopenic purpura are not cured by splenectomy is readily admitted, but in cases with recurring symptoms, it offers the best chance for a permanent cure. Splenectomy is now considered the treatment of choice as soon as a definite diagnosis of idiopathic thrombocytopenia purpura can be made.

Wintrobe and associates,²³ reporting the results in the treatment of 63 patients with purpura, showed that in 44 treated medically and observed for periods of time longer than three years, there were only 29.8 per cent that obtained a permanent remission, and there was a mortality of 13.6 per cent in this group from the disease. This was in contrast to 19 patients subjected to splenectomy with permanent remissions in 75 per cent, and a mortality of 15.7 per cent, only 2 per cent higher than in the medically treated group. It is obvious that medical treatment is not without its dangers. Mayo and Griffin,¹⁸ reporting on 57 splenectomies for purpura between 1923 and 1934, showed an operative mortality of 4 per cent. A follow-up study on these cases covering from one to ten years showed 63 per cent permanent remissions and 35 per cent improved, with only one recurrence of severe hemorrhage. Improvement was considered to mean a cessation of bleeding but a continuance of a tendency to bruise easily. On

this basis 98 per cent showed improvement to a degree to justify splenectomy. Eliason and Ferguson,²⁴ reporting on 213 collected cases in which splenectomy was performed, showed a total mortality of 13.1 per cent but for 113 cases done between 1928 and 1932, a mortality of 7 per cent. There were 73.2 per cent of the cases with permanent cures and 8 per cent improved, a total of 81.2 per cent with satisfactory results and only 2.8 per cent unimproved. Patients subjected to splenectomy in an acute phase of the disease showed a mortality of 34.2 per cent with 65.7 per cent, or all cases surviving operation, showing satisfactory results. In patients splenectomized in a quiescent or chronic stage, the mortality was 7 per cent with 88.1 per cent satisfactorily improved and only 2.5 per cent unimproved. None of my patients has been operated on during an acute exacerbation of the disease. The cases showing acute symptoms have all been treated by repeated transfusions, at times, associated with x-ray over the spleen and have been splenectomized after the bleeding time was reduced to safer limits.

It is obvious that in a disease involving a system so widespread as the reticulo-endothelial system, the removal of one part of that system, even though a major part, may not relieve the symptoms in 100 per cent of cases. Various theories are advanced as causes of the continuance of symptoms after splenectomy, perhaps the most logical being that the remaining part of the reticulo-endothelial system rapidly compensates for the loss of the spleen. The part played by focal infection in recurrences, as well as in initial attacks, is not understood but is clearly recognized, and the failure to remove such foci as diseased tonsils or abscessed teeth may be the factors stimulating the reticulo-endothelial system to the over-destruction of blood platelets. This is rather strikingly demonstrated in two of the cases reported by me,²⁸ one in which permanent remission occurred after one attack associated with acute pharyngitis; one in which a recurrence developed due to failure to remove diseased tonsils, with a permanent remission 9½ years following tonsillectomy. A second cause which

must be given serious consideration is the presence of an accessory spleen which was not removed at the time of splenectomy. Fradkin²⁵ reported that various pathologists gave the occurrence of accessory spleens to be from 11 to 35 per cent, and there may be from one to seven of these accessory splenic nodules. He reported one case of purpura with a recurrence of symptoms shortly after splenectomy in which an accessory was noted at the time splenectomy was performed but which was not removed. Eccles and Freer²⁶ report a case in which splenectomy was performed and at a subsequent operation eight years later, a spleen of almost normal size was found. These accessory spleens are more common in children and tend to atrophy with maturity. In the 37 splenectomies performed by me, accessory spleens were encountered and removed in 4 cases.

There have been 13 patients studied with the diagnosis of purpura and 11 of these were splenectomized. The 2 not operated upon were diagnosed as symptomatic purpuras. They were both females and their symptoms appeared to be caused by acute infections in the nasal pharynx. One has had a complete remission to date — twelve years. The second case was free of symptoms for two years, when she had a recurrence during an attack of acute tonsillitis. Following this attack her tonsils were removed and she has been free of symptoms since, except for bruising easily. The 11 patients subjected to splenectomy showed sudden cessation of bleeding and an immediate rise in the platelet count. Ten of these have remained well; the other patient was well for twelve months, at which time she had a tonsillectomy and died a few hours later. At that time her platelet count was 130,000 and there was no abnormal bleeding. An autopsy was not permitted and the exact cause of death was not determined.

Hemolytic Jaundice

This is a chronic disease, familial in character, characterized by mild jaundice, anemia and splenomegaly.^{11, 12} The diagnosis is established by the finding of spherical microcytes in the blood smears and by

an increased fragility of the red cell to hypotonic salt solution. It is believed that the spherical microcyte is the pathologic entity in this disease and it is the destruction of this cell by the spleen which produces the anemia and jaundice. It has been shown¹¹ that the blood in the splenic artery contains 10.4 per cent spherical microcytes, while the splenic pulp contains 48 per cent and the splenic vein only 8.4 per cent. Splenectomy is the treatment of choice and is curative. Patients with hemolytic jaundice may retain the spherical microcyte and increased fragility pictures after splenectomy but show no jaundice. Lord Dawson of Penn¹⁴ reported a woman who showed increased fragility 45 years after splenectomy although there had been no recurrence of the jaundice.

Thompson²⁷ reported 30 cases of hemolytic jaundice subjected to splenectomy without an operative death, all of whom remained well and free of symptoms over varying periods of years. He also reported 15 cases of atypical jaundice in which all evidence of the disease was present except the spherical microcyte and increased fragility pictures. Four of these patients were subjected to splenectomy without improvement. The remaining 11 were proved in the course of time to have other causes for the jaundice. Mayo and Griffin¹⁷ reported 128 patients subjected to splenectomy with an operative mortality of 3.1 per cent. Of 11 deaths in subsequent years only 4 could be attributed to the original disease. Of 110 of the patients living at the time of their report, 86 per cent were entirely well. These authors stress the importance of early splenectomy in cases of hemolytic jaundice, before secondary hepatic changes have set in, as in their experience operative and late mortalities were higher in the group with liver damage. There have been 16 cases of hemolytic jaundice in my series, all patients being treated by splenectomy without mortality. These patients have all remained well.

We have studied one patient with the diagnosis of idiopathic leukopenia with splenomegaly. This was a woman, aged 45, who was treated by splenectomy, July 1942,

with recovery. This patient is still living but we have not had an opportunity to re-study her.

Tumors and Cysts of the Spleen

Tumors of the spleen, either benign or malignant, are rare. I¹⁵ reported a case of fibro-angioma of the spleen in 1937, and at that time found only 25 additional cases reported in the literature. Krumbhaar and Scott¹ reviewed the literature in 1928 and reported 28 cases of various types of tumors. Primary malignant tumors of the spleen are extremely rare, and those occurring are sarcoma; even in extensive carcinomatosis involvement of the spleen is very rare.

Cysts of the spleen are more common. They are frequently secondary to trauma, occurring as hemorrhagic or serous cysts and may be single or multiple. They are occasionally secondary to true angioma. Fowler²⁸ reviewed the literature in 1913 and reported on 82 cases of cysts of the spleen. In this series there were only two cases that were thought to be secondary to an angioma. Parasitic cysts and dermoids of the spleen have been reported. The diagnosis is usually made by exclusion of other causes of splenomegaly and the true nature of the growth is determined at the time of exploration. Treatment is splenectomy.

Summary

1. A brief review of the literature on surgery of the spleen has been outlined.
2. Thirty-nine patients with disease of the spleen have been studied and 37 of these were treated by splenectomy without an operative mortality.
3. Splenectomy was performed on 1 patient for secondary tuberculosis of the spleen causing splenomegaly; 11 with idiopathic thrombocytopenic purpura; 16 with hemolytic jaundice; 1 with the diagnosis of idiopathic leukopenia with splenomegaly and 1 with a fibro-angioma of the spleen.
4. While we have not been able to check all these patients, as far as we have been able to determine 10 patients with

idiopathic thrombocytopenic purpura obtained satisfactory remission of symptoms and the 16 with hemolytic jaundice are well. Six of the 7 with Banti's disease were free from symptoms when last heard from. The 1 patient with idiopathic leukopenia is living two years following operation but we have not had an opportunity to re-examine her. The one with fibro-angioma of the spleen, who was four months old at the time of operation, has remained well and is developing normally.

5. With few exceptions, these 39 patients were studied by Dr. Roy Kracke, formerly Professor of Pathology at Emory University. The immediate operative mortality and the postoperative morbidity depend largely on a correct diagnosis, and in no type of patient is the close cooperation between the internist, the pathologist and the surgeon more essential.

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THE MODERN TREATMENT OF EMPYEMA

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Empyema in the past has been the most frequent complication of pneumonia, and may occur as a result of a punctured chest injury either from a stab wound, a gunshot wound or as a result of a crushing injury to the thorax. The surgeon, as a rule, does not observe the development of empyema, but deals only with the end-results, which may put him at a disadvantage.

Empyema was known to the Ancients, and has been recognized as far back as there is recorded medical history. It was known to and treated by Hippocrates 400 B.C. For 2400 years the treatment has varied very little, which is drainage of the pus cavity.

Empyema and pneumonia are so closely associated and the end-results of treatment depend so much upon the time element and the method of treatment that there should be close cooperation between the internist and the surgeon.

Generally speaking, there might be said to be three types of empyema, the first being the pneumococcic type which follows lobar pneumonia and is always purulent. It becomes localized early by pleural adhesions and it develops slowly, and is usually not recognized until after the patient has passed the crisis. This type should always be drained promptly and thoroughly and as early as diagnosed.

The second type of empyema is associated with bronchopneumonia, and develops during the course of the pneumonia while the infection in the lung is still active. It is usually due to the streptococcus, and is not localized by adhesions. This type is frequently seen in children, and it was also

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this type which was associated with the influenza epidemic in World War I.

The diagnosis of empyema is made by physical signs, which are often misleading, and by the x-ray films which are not always correct, and lastly by aspiration which is the absolute test. When fluid is secured by aspiration it should be studied carefully. If the pus is thin and watery, greenish or brownish in color, and does not contain fibrin flakes it is usually streptococcic in origin, as may be determined by microscopic study. The pus from pneumococcic empyema is thick and yellow and contains masses of fibrin flakes and the microscopic examination shows pneumococci in large numbers.

The third type of empyema is not so common; it is the so-called fetid or putrid type and is caused by a mixed infection and may be associated with lung abscess or bronchiectasis or may result from an injury to the chest, or may result of an infected hemothorax.

Epidemics of pneumonia vary greatly in type and in intensity; also the type of infection varies. In 1917-18, we had an epidemic of a severe type of influenza, complicated with pneumonia, which was new to the medical profession. Many of these patients developed empyema early in their illness and many were operated upon promptly — too promptly — and promptly died, because the infection was due to a very virulent streptococcus hemolyticus. This epidemic became a major surgical problem to the United States Army Medical Corps. Most of the medical officers were former civilian doctors and their knowledge of empyema in the past was limited to their experience with pneumococcic empyema in civil life, which was usually treated successfully by open drainage. A great many of the patients in the epidemic of 1917-18 came because of this very pernicious type of streptococcic infection, the empyema developed early in the course of the pneumonia and the surgeon was called in promptly and too often a rib-resection was performed and the empyema drained. The results were very disastrous due to the fact that adhesions had

not formed and the mediastinum had not become fixed, and when the chest cavity was opened there was a shift to the opposite side with limited breathing space and embarrassed heart action. The already weakened and toxic patient, still acutely ill, could not stand the shock. The mortality was very high, 40 to 50 per cent.

The distressing reports from the various Army camps all over the country poured into the Surgeon General's office in Washington, and when summed up, the results were staggering. At that time I was a surgeon in an Army camp in Mineola, Long Island, to the port of debarkation; and later with an evacuation hospital in France. The medical officer on service with me at Mineola was Dr. Charles Mix, of Chicago, an outstanding internist. We very soon realized that something was wrong with our results and we began waiting longer to evacuate the pus, using repeated aspirations and waited until the aspirations showed frank cloudy pus before doing an open operation, and our mortality rate was reduced from 40 to 10 per cent.

The Surgeon General appointed an Emphyema Commission who traveled over the country visiting the various Army camps and witnessing the tragedy being enacted, and they made a report following which orders were sent out to every Army camp directing that all empyemas should be aspirated first and a thorough study made of the fluid obtained, and if found to be due to streptococcus to practice repeated aspirations and to delay ten days or more before draining.

Some surgeons advocated the so-called closed method which was done by inserting a trocar between the ribs, then to remove the trocar and insert a soft rubber catheter through the canula and then withdraw the canula. A perforated piece of adhesive plaster was placed over the catheter fixing it to the chest wall, then this catheter was attached to a bottle sitting on the floor and containing water with the end of the tube under the water making a trap that would prevent the entrance of air but allow the free exit of fluid. Some used a Y tube with a clysis bottle by which alternate irriga-

tions could be done. Others advocated the open method, and I must admit that I belonged to the second group. A combination of the two methods is better, as many of those treated by the closed method became chronic and later required repeated operations due to inadequate drainage.

The treatment of chronic empyema will not be considered here except to say that it is very unsatisfactory, as an open operation must be done and a partial decortication of the thickened pleura covering the lung must be done which is a very shocking operation with a high mortality rate.

Now, since 1938 we have had the sulfonamides which are freely used in pneumonia with such dramatic results that the incidence of empyema has been reduced from 5 per cent to 1 per cent or less, and it has been thought that perhaps the use of these drugs might entirely eliminate the complication of empyema, but we still have empyema and with the use of the sulfonamides it has become atypical and bizarre and calls for a re-evaluation of this disease. Some cases develop a hepatitis due to a prolonged use of the sulfa drugs, while in other cases there are multiple small empyema pockets which may necessitate repeated operations, while in other cases the lung is slow to expand after drainage. In some instances the empyema is interlobar.

It is the general opinion now that when once pus has formed in the pleural cavity that the sulfa drugs should be stopped at once, as they not only are not beneficial but really are deleterious in such cases. A collection of pus cannot be sterilized by the sulfonamides but must be evacuated at the most dependent portion of the cavity.

Since the advent of penicillin we find it to be an improvement over the sulfonamides both in pneumonia and empyema, and it has been found that a solution of penicillin, if injected into the empyema cavity after aspiration on alternate days, will, in some cases cure the empyema, but in other cases it becomes necessary to do an open operation with drainage.

The fever curve and the appetite are ex-

cellent clinical indications of the patient's condition; if the drainage is adequate the temperature returns to normal promptly and the patient develops a good appetite, and the opposite is true if the drainage is inadequate. We might sum up the present day treatment of empyema as follows: When the physical signs and the x-ray film indicate pus in the pleural cavity, aspirate and study the fluid obtained as to the specific gravity; if low, wait until it reaches 1040 or above before doing an open drainage. Study the bacteriology involved by slide and culture; if streptococci are present do not do an open operation too soon, rather practice repeated aspirations and inject penicillin on alternate days. Then, if the pus becomes cloudy and after approximately ten days the fever curve is still present, resect a rib with open drainage. If the pus is thick and contains fibrinous masses an open operation should be done at once and at the most dependent portion of the cavity. Irrigations will hasten healing and I suggest using either sodium hyperchlorite or Dakin's solution or Azochloramid 1:3300, as they will hasten sterilization of the cavity. The use of the blowing bottles or having children to blow up rubber balloons will also hasten the expansion of the affected lung. Shorten the drainage tube from time-to-time as the cavity becomes smaller, and toward the last the cavity should be measured daily by the quantity of fluid required to fill it. Never remove the drainage tubes until the cavity is completely obliterated. Watch the temperature curve also during the patient's clinical course.

If one is not sure when the cavity is obliterated, then inject a 10 per cent solution of sodium iodide and make an x-ray film, which will show accurately the size and position of the cavity, and films made at weekly intervals will keep one informed of the progress of the case. The treatment of an empyema patient should always have the surgeon's personal attention and should never be left to a second assistant or to an intern.

THE PRESIDENT'S PAGE

IS "CHRISTMAS" A MISNOMER?

The Christmas Season — or the Christ mass, for that is origin of the word — is too near at hand for much hope or comfort to come to us from the battlefronts. The "Prince of Peace" will have little of the usual hilarity and glittering pageantry in celebration of this, His 1944th birthday. I am wondering if the change is not more in keeping with the occasion? He was born in just such a period of tyranny and blood-letting as the world finds itself in today. In fact, there were ever wars! A clever statistician has computed that of 4,000 years of recorded history, there have been only 400 years of peace.

But it is more or less new business for *our* country to fight on such far-flung battlefields for such a length of time. My own idea is that in these three years of our war, so grievous and withering to us, with bitter loss and physical strain, we have become closer kin to mankind everywhere, our spirits have become more sensitive to human needs, and even above the hatred that has driven us to fight, there soars the will to be just and kind even to the wounded of our enemies.

Surely this is the solemn ordeal and sacrifice that would prepare us for the "abundant life" — whatever that is — which we crave for the New Year. I believe it is devotion to hard work; consistent use of our minds; intelligent decision in daily problems; honest dealing with our fellows; and sacrificial service to those in need. Philosophers of old have deduced that we get what we give, and find what we look for. Given the means of a doctor's knowledge and skill, no day should be void of its joys and satisfactions.

I found the following challenge, which has so arrested my own spirit of self-search-



ing, that I want to pass it on to you: "Are you willing to forget what you have done for other people and remember what other people have done for you? To see that your fellowmen are just as real as you are, and try to look behind their faces to their hearts hungry for love? Then you come to Bethlehem babe's birthday in the right attitude.

Are you willing to stoop down and consider the needs and desires of little children; to remember the weakness and the loneliness of those growing old; to stop asking whether your friends love you enough, and ask yourself whether you love them enough to bear their slights, burying their ugly words? Then you can keep Christmas. Are you willing to believe that love is the strongest thing in the world — stronger than hate, than evil, than death? That Christ is the giver of love that will live always above all things? Then you can keep Christmas and keep it above poverty, war and death."

And what's more, this is the answer to our quest for the "abundant life," for this coming year and for eternity. Or else Christmas is a misnomer —

CLEVELAND THOMPSON, M.D.

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FIND PENICILLIN NOT EFFECTIVE AGAINST RHEUMATOID ARTHRITIS

*Results From the Treatment of Ten Soldiers
With the Disease Also Indicate That it is
Not Caused by Hemolytic Streptococci*

The hope that penicillin might prove effective against rheumatoid arthritis appears to be futile. Results obtained from the treatment of 10 soldiers with early but progressive rheumatoid arthritis indicate that the drug is of no value for this disease, offer no support to the idea that it is caused by hemolytic streptococci and lead to the assumption that rheumatoid arthritis is not caused by any of the bacteria which are already known to be rapidly affected by penicillin, Lieutenant Colonel Philip S. Hench, Medical Corps, Army of the United States, reports in *The Journal of American Medical Association* for November 23.

"Our clinical results from penicillin . . . were essentially negative," he says. "In 7 of the 10 cases there was no significant subjective or objective improvement. One patient felt worse but did not appear to be in worse condition than before treatment. In 1 case there was slight subjective, but no definite objective, improvement. One patient experienced moderate objective and subjective improvement in some, but not in all, his affected joints; the sedimentation rate increased slightly during treatment, and he was by no means cured or even decidedly improved. In view of the capricious nature of rheumatoid arthritis the improvement in these 2 cases must be regarded as unrelated to the penicillin."

Colonel Hench explains that the cause of rheumatoid arthritis is unknown and that "of the many impressions regarding its cause, the microbic hypothesis is still the

most widely accepted and, of the many different bacteria which have been incriminated, hemolytic streptococci have been, since 1929, most under suspicion.

"Hemolytic streptococci from time to time have been recovered from the synovial fluid and blood, from foci of infection and occasionally from synovial membrane, bone and lymph nodes of patients with rheumatoid arthritis. The blood of the majority of patients who have this disease contains antibodies against hemolytic streptococci. . . ."

He points out that because many patients with unmistakable rheumatoid arthritis do not present such evidence, the hypothesis that it is caused by hemolytic streptococci has remained presumptive only.

"Ever since it was announced that penicillin was extremely effective against a variety of infectious agents, including hemolytic streptococci," Colonel Hench says, "many physicians and a host of rheumatic patients have been hopefully awaiting news that penicillin might prove effective against rheumatoid arthritis. True, the sulfonamides, also effective against hemolytic streptococci, have proved useless against this disease. But it was hoped that penicillin might somehow prove to have power superior to sulfonamides against hemolytic streptococci or, if hemolytic streptococci were not the cause of rheumatoid arthritis, perhaps penicillin might kill the 'undiscovered germ' of the disease. Hence, even though we never had accepted hemolytic streptococci as the cause, we were pleased when the War Department and the Surgeon General's Office authorized the staff of the Rheumatism Center of the Army at the Army and Navy General Hospital (Hot Springs, Ark.) to give penicillin a clinical trial in rheumatoid arthritis.

"The only cases chosen for trial for treatment with penicillin were those in which the disease had advanced far enough to be diagnostically unmistakable but not far enough to have produced irreversible changes (destruction of cartilage and subchondral bone, notable flexion deformities), the presence of which might have made this a clear cut evaluation of results.

"We decided to give penicillin long enough and in large enough doses so that, were our results negative, it could not well be said that our patients had not received sufficient amounts of the material.

"Ten patients have been treated intensively. All were male soldiers recently on active duty. Their ages were from 23 to 45 (average 30) years. Eight of the patients never had had the disease prior to active duty. Two of the patients had had the disease mildly in civilian life. . . . Excluding the disease from which these 2 patients had suffered before they entered military service, the 10 patients had been ill from two to eighteen months, an average of 7.4 months. Thus, their disease was in a fairly early stage.

"The symptoms were characteristic of rheumatoid arthritis: aching, soreness, stiffness and 'jelling' of joints and muscles; weakness, fatigue, malaise, loss of appetite and some loss of weight and, finally, hyperhydrosis of the extremities. Five of the patients walked with a limp; 1 was temporarily bedridden. Before they had come to this hospital, the patients had been treated with salicylates, rest, vitamins, sulfonamides (no effect) and the removal of tonsils (2 cases) and teeth. . . ."

The patients were given large doses of penicillin intramuscularly every three hours day and night. The daily doses of penicillin were from 120,000 to 320,000 Oxford units; total doses were from 1,800,000 to 3,250,000 units within fourteen to twenty days.

"Such large doses," Colonel Hensch says, "are known to be adequate, indeed perhaps more than adequate against severe infections . . . from hemolytic streptococci, *Staphylococcus aureus* and so forth. . . ."

"Definite improvement in appetite was noted by 6 of the 10 patients. It may have been unrelated to treatment with penicillin or it may have been a general side effect thereof. . . ."

In conclusion Colonel Hensch says that "From these negative results we would conclude that penicillin probably should not be used for the further clinical treatment of rheumatoid arthritis, at least until

the material is available in something approaching inexhaustible quantities. Further researches with penicillin in rheumatoid arthritis may be in order. At present the limited supplies available for clinical use should be allotted for the treatment of patients with diseases in which curative results are more likely to eventuate than in rheumatoid arthritis."

VITAMIN SUPPLEMENTS ARE FOUND OF NO VALUE FOR NORMAL PERSONS

Their Administration To Group Of Students Consuming Usual American Diet Had No Demonstrable Beneficial Effect

"Administration of vitamin supplements to a group of apparently normal persons, consuming the usual American diet, had no demonstrable beneficial effect," Julian M. Ruffin, M.D., and David Cayer, M.D., Durham, N. C., report in *The Journal of the American Medical Association* for November 25. The study was conducted at the Duke University School of Medicine at the request of the Office of the Quartermaster General, U. S. Army. Volunteer medical students and technicians were used as subjects.

"Our purpose in this study," the two physicians say, "was to obtain impartial and intelligent daily records of the effect of various vitamin supplements on apparently normal persons. It was felt that in such a study medical students would be not only cooperative but critical as well. The duration of the experiment was set arbitrarily at thirty days. In our experience, patients having frank vitamin deficiencies recover rapidly when specific therapy is instituted. It is reasonable to assume that a subclinical deficiency should respond just as promptly to treatment, and therefore it was felt that nothing would be gained by prolonging the experiment.

"All of the subjects were consuming the usual American diet and apparently were in good health. Before beginning the experiment 20 of them, selected at random, had vitamin studies made, including the determination of carotene, vitamins A and C, nicotinic acid, thiamine hydrochloride, riboflavin, pyridoxine, pantothenic acid and prothrombin time. All of these were within normal limits."

In the introduction to their paper, Drs. Ruffin and Cayer explain that "At the present time the use of vitamins is widespread throughout the country, not only in the treatment of disease, but also by apparently normal persons. While no one would question the employment of vitamin therapy in frank deficiency diseases or even in suspected deficiency states, still one wonders if the indiscriminate use of vitamins, sold over the

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GEORGIA DEPARTMENT OF PUBLIC HEALTH

T. F. ABERCROMBIE, M.D., *Director*

MILK IN RELATION TO FOOD-BORNE DISEASES

Of all things necessary for sustenance of human life, food is the most important. Food is to man as fuel is to the machine. The human machine derives its energy from its food-fuel. An adequate supply of clean burning food-fuel for the human engine is absolutely fundamental for health and efficiency. The fuel for the automobile is gasoline, the fuel for the man-motor is food. The fuel for the automobile must be of good quality, so must the food-fuel for the human body. Often one is more concerned with the quality of his automobile fuel than with the food-fuel for his body. It has been appropriately said that food will win the war. This may be true especially if the food is of good quality.

Food improperly selected, improperly stored, and improperly handled is responsible for many human ills. This is especially true during the present war, due to congestion of populations, frequent turnover in employees in dairies, in restaurants and in other food handling establishments, shortage of public health workers, restrictions on mechanical equipment, and the scarcity of domestic servants necessitating eating out. These factors are used too frequently as excuses by food establishments. Georgia has been no exception to this and the increase of sickness by unsafe food has been prominent. The records of other states prove this to be true throughout the nation. This has reflected in a greater demand upon state and local health departments for increase in epidemiologic and food sanitation service.

Limitations restrict discussion of various foods and types of infections which have occurred in this and other states during 1944. Such information has been compiled by the U. S. Public Health Service and is a matter of record, therefore milk will be the subject of this discussion. Because of the perishable nature of milk, its suitability as a medium for propagation of bacteria, and the potentialities for contamination on the long route from production to consumption, milk is more vulnerable than any other food. Therefore it is appropriate to analyze the past record of milk and its relation to disease. The incidence of milk-borne diseases over an extended period is given as follows:

Each year between 30 and 50 outbreaks of milk-borne diseases have been reported to the Public Health Service by state and local health authorities in the United States. For the 15-year period from 1923-1937 inclusive, 639 milk-borne outbreaks were reported, involving 25,863 cases and 709 deaths. In the order of their importance the diseases included were: (1) typhoid fever, with 369 outbreaks, 6,461 cases, and 486 deaths;

(2) septic sore throat, with 75 outbreaks, 9,467 cases, and 117 deaths; (3) scarlet fever, with 84 outbreaks, 5,725 cases, and 52 deaths; (4) dysentery and enteritis, with 34 outbreaks, 1,506 cases, and 26 deaths; (5) paratyphoid fever, with 23 outbreaks, 1,029 cases, and 22 deaths; (6) diphtheria, with 13 outbreaks, 179 cases, and 4 deaths; and (7) miscellaneous diseases, including food poisoning, with 41 outbreaks, 1,496 cases and 2 deaths.

The above shows an average of 1,724 cases per year. It is interesting to note how the year 1943 compares in cases with the average for the 15 years between 1923 and 1937. The number of cases reported for 1943 were 1,632. This does not show the reduction that might be expected. This is because of conditions resulting from the war.

It should be noted that this compilation does not include sporadic cases of typhoid fever, scarlet fever, septic sore throat, etc., since such sporadic cases have rarely been given sufficient epidemiologic study to determine the role of milk and milk products in the cause of these diseases. Nor does it take into account such diseases as bovine tuberculosis, undulant fever, or infantile diarrhea, which are largely milk-borne but generally occur as sporadic cases rather than in epidemic form.

The prime factor in prevention of milk-borne diseases is sanitation to the highest degree, together with health of both the animal and of those who handle the milk. For added safety, this should be followed by pasteurization. Pasteurization should never be considered as a substitute for sanitary measures. There are far too many mechanical failures, indifference and negligence in operations to insure a safe milk by pasteurization only. When such failures occur and the milk is not first of a high sanitary quality there is no dependable safeguard. Then pasteurization of milk of a high sanitary quality is the criteria. With proper operation, it has been proved that pasteurization will accomplish the following:

All milk-borne pathogens are killed at 143° F. for 30 minutes and at 160° F. for 15 seconds. The following thermal death points of various pathogens in milk are taken from literature: *B. tuberculosis*, 155° F. in 1 minute and 142° F. in 10 minutes; *B. typhosis*, 142° F. in 7 minutes; *B. diphtheriae*, 140° F. in 10 minutes. *Streptococci*: All of 200 strains of hemolytic streptococci from septic sore throat and scarlet fever were killed at 140° F. in 30 minutes, most of them at 136° F. or less. *Br. melitensis* and *Br. abortus*: 13 strains of human, bovine and swine origin were killed at 140° F. in 10 minutes; *B. dysenteriae* at 140°

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GUIDANCE FOR INDUSTRIAL NURSES

FLO BECK, R.N.

*President, Georgia Association
of Industrial Nurses*

The state industrial nurse consultant is Miss Gwen Dekle, R.N., B.S. Miss Dekle serves with Dr. L. M. Petrie, who is director of the Industrial Hygiene Division, Georgia Department of Public Health. She was employed by the Industrial Hygiene Division in October 1944. Her broad educational background and experience give Georgia industrial nurses confidence that excellent guidance will continue to be available. Miss Dekle attended school at Georgia State College for Women before entering Georgia Teachers' College at Statesboro, where she graduated with a B.S. degree in 1936. She graduated in 1939 from Mt. Sinai Hospital School of Nursing, New York City. In 1940 Miss Dekle received her certificate in Public Health Nursing from George Peabody College, Nashville, and was employed in 1940 as public health nurse for Thomas County, Georgia. In September 1942 she was made a Northwest Regional Public Health Nurse and served there until coming to the Industrial Hygiene Division, in October 1944.

Careful guidance for the nurse in industry is pertinent at this time because of the rapid development in this field. In the fall of 1941 there were only 80 industrial nurses. A recent report indicates that there are approximately 236 industrial nurses in Georgia, making an increase in the past three years of 156. A majority of these nurses have been taken from fields other than public health and their special preparation for the work is necessarily limited. They have been anxious to organize and to form study groups through which guidance will be available.

Several local industrial nurses clubs are active in Georgia. Conferences on the "Health of the Worker" have been held in strategic industrial areas of the State. Industrial nursing courses are being given in leading universities. Many of the industrial nurses have enrolled in other public health nursing courses at the universities and are seeking general health education.

Industrial nursing, as any other branch of nursing, involves attitudes and personalities. Attitudes involve an age-old problem; namely, that of approach. An understanding of the industrial nurse and the problems facing her, with a sincere desire to assist, brings about an active response. On the other hand, attempts to force opinions upon her bring about defensive attitudes which only tend to further the retardation of the industrial nurse in seeking equal opportunities now enjoyed by other branches of nursing. The industrial nurse has been most receptive to suggestions given in her specialty from an official agency at the State level, and has evidenced much and varied interest in the subject of the "Health of the Worker" and the development of a sound health program in industry.

The Georgia Association of Industrial Nurses is an active group with Miss Flo Beck serving as president. Miss Beck is industrial nurse at Chicopee Mills, Chicopee. This group promoted a stimulating annual program December 5 at Atlanta when Mrs. Ann Cox Hare, supervisor of nursing, Tennessee Valley Authority, Chattanooga, was guest speaker. Mrs. Hare made a special appeal for further education for the nurse in industry.

Further organization plans are being formulated and in the near future we expect great advancements in industrial nursing service for Georgia.

In order to evaluate the problems pertaining to health as related to industrial nursing, a survey of the situation presented in Georgia is a necessity. Each state must of necessity be considered as an individual entity, presenting problems peculiar to the section and region in which it is situated and the laws by which it is governed.

The compilation of a roster of the industries employing nurses with the names of the nurses employed therein is among the first necessary tasks. The sources of information are various. State, district, county, and municipal health departments can be utilized. Active industrial nursing organizations are most cooperative in supplying this information.

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Agnor, Mrs. Elbert B., 1657 Harvard Rd., N. E., Atlanta
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Anderson, Mrs. W. W., 63 Avery Dr., N. E., Atlanta
Arthur, Mrs. J. F., 1181 Briarcliff Pl., N. E., Atlanta
Askew, Mrs. H. H., 1329 Springdale Rd., N. E., Atlanta
Bailey, Mrs. M. K., 1149 Ponce de Leon Ave., N. E., Atlanta
Baker, Mrs. Luther, 52 Seventeenth St., N. E., Atlanta
Ballenger, Mrs. W. L., 42 Rumson Way, N. E., Atlanta
Bancker, Mrs. Evert A., Jr., 3810 Club Drive, N. E., Atlanta
Barnett, Mrs. Crawford, 2628 Rivers Rd., N. W., Atlanta
Bivings, Mrs. Lee, 3110 Habersham Rd., N. W., Atlanta
Bivings, Mrs. Troy, Jr., 1860 Flagler Ave., N. E., Atlanta
Blackman, Mrs. W. W., 248 W. Andrews Dr., N. W., Atlanta
Blalock, Mrs. Frank A., 150 Anderson Ave., S. W., Atlanta
Blalock, Mrs. J. C., 734 W. Wesley Rd., Atlanta
Blalock, Mrs. Tully T., 1324 Briarcliff Rd., N. E., Atlanta
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Boland, Mrs. Frank K., Jr., 129 Peachtree Memorial Dr., N. W., Atlanta
Boland, Mrs. Jos. H., 505 Argonne Dr., N. W., Atlanta
Boyd, Mrs. Hartwell, 263 The Prado, N. E., Atlanta
Boyd, Mrs. Montague L., 2560 Habersham Rd., N. W., Atlanta
Brannen, Mrs. Cliff, 8 Collier Rd., N. W., Atlanta
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Brawner, Mrs. Jas. N., 2800 Peachtree Rd., N. E., Atlanta
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Burch, Mrs. J. C., 150 Anderson Ave., S. W., Atlanta
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- Byrd, Mrs. T. Luther, 1752 N. Pelham Rd., N. E., Atlanta
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 Carothers, Mrs. Jas. B., 165 Lakeview Dr., N. E., Atlanta
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 Childs, Mrs. J. R., 1965 Ponce de Leon Ave., N. E., Atlanta
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 Davis, Mrs. Shelley C., 1259 Peachtree Battle Ave., Atlanta
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 Davison, Mrs. T. C., 3136 Habersham Rd., N. W., Atlanta
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 Howell, Mrs. Stacy C., 431 Brentwood Drive, Atlanta
 Hunter, Mrs. Conway, 930 Lullwater Rd., N. E., Atlanta
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 Johnson, Mrs. Trimble, 11 Collier Rd., N. E., Atlanta
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 Kiser, Mrs. Wm. H., Jr., 210 Peachtree Circle, N. E., Atlanta
 Klugh, Mrs. George F., 395 Tenth St., N. E., Atlanta
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 Lowance, Mrs. Mason L., 877 W. Wesley Rd., Atlanta
 Lower, Mrs. Emory G., 619 Myrtle St., N. E., Atlanta
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 Malone, Mrs. O. T., 379 Collier Rd., N. W., Atlanta
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 Martin, Mrs. Wm. O., Jr., Blackland Rd., N. W., Atlanta
 Mashburn, Mrs. Chas. M., LaVista Rd., Atlanta
 Matthews, Mrs. Tom, 4040 Randall Mill Rd., Atlanta
 Matthews, Mrs. O. H., 61 Barksdale Dr., N. E., Atlanta
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 McDougall, Mrs. Calhoun, 2899 Andrews Dr., N. W., Atlanta
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 McLoughlin, Mrs. C. J., 2465 Rivers Rd., Atlanta
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 Sage, Mrs. Dan Y., 47 Inman Circle, N. E., Atlanta
 Savage, Mrs. Jas. H., 733 Peeples St., S. W., Atlanta
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 Spearman, Mrs. G. F., 190 The Prado, N. E., Atlanta
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 Turner, Mrs. John W., 157 Seventeenth St., N. E., Atlanta
 Upchurch, Mrs. W. E., 2774 Atwood Rd., N. E., Atlanta
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 Wells, Mrs. W. Frank, Atlanta
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 Whipple, Mrs. Robt. L., Jr., 225 Huntington Rd., N. W., Atlanta
 Wood, Mrs. Hugh, 1657 Harvard Rd., N. E., Atlanta
 Willingham, Mrs. T. I., 20 Highland Dr., N. E., Atlanta
 Yampolsky, Mrs. Jos., 746 Brookridge Dr., N. E., Atlanta
 Wagnon, Mrs. George (Asso.), 365 Mayson Ave., N. E., Atlanta
 Williams, Mrs. George, 135 Montgomery Ferry Dr., Atlanta

SIXTH DISTRICT

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BALDWIN COUNTY

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 State Hospital, Milledgeville

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 Allen, Mrs. H. D., Allen's Invalid Home, Milledgeville
 Anderson, Mrs. S. A., State Hospital, Milledgeville
 Bailey, Mrs. L. A., Columbia Street, Milledgeville
 Binion, Mrs. Richard, 310 W. Green St., Milledgeville
 Bostwick, Mrs. W. A., State Hospital, Milledgeville
 Bradford, Mrs. R. W., State Hospital, Milledgeville
 *Cary, Mrs. H. R., N. Jefferson St., Milledgeville
 Cox, Mrs. C. G., State Hospital, Milledgeville
 Clodfelter, Mrs. T. C., State Hospital, Milledgeville
 Echols, Mrs. G. L., State Hospital, Milledgeville
 Fulghum, Mrs. C. B., N. Jefferson St., Milledgeville
 Garrard, Mrs. J. I., State Hospital, Milledgeville
 Longino, Mrs. L. P., W. Green St., Milledgeville
 Richardson, Mrs. C. H., N. Columbia St., Milledgeville
 Sikes, Mrs. Z. S., State Hospital, Milledgeville
 Walker, Mrs. E. Y., Columbia St., Milledgeville
 Walker, Mrs. N. P., W. Green St., Milledgeville
 Wiley, Mrs. J. D., Milledgeville
 Woods, Mrs. O. C., N. Jefferson St., Milledgeville
 Yarbrough, Mrs. Y. H., State Hospital, Milledgeville

BIBB COUNTY

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 Atkinson, Mrs. Harrold, 206 Corbin Ave., Macon
 Anderson, Mrs. Carl, 280 College St., Macon
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 Applewhite, Mrs. J. D., 565 College St., Macon
 Chrisman, Mrs. W. W., 112 Corbin Ave., Macon
 Barton, Mrs. W. L., Terrace Apts., Macon
 Bashinski, Mrs. Ben, 120 Buford Place, Macon
 Baxley, Mrs. W. W., 219 Buford Place, Macon
 Bazemore, Mrs. Wallace, 127 Beverly Place, Macon
 Boswell, Mrs. Charles, 322 Buford Place, Macon
 Clay, Mrs. Emory, 364 Cherokee Ave., Macon

Corn, Mrs. Ernest, 555 College St., Macon
 Fountain, Mrs. James, Shirley Hills, Macon
 *Golson, Mrs. Willard, Fort Bragg, N. C.
 Harrold, Mrs. Charles, 550 Orange St., Macon
 Harrold, Mrs. Thomas, Jr., 567 College St., Macon
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 Hinton, Mrs. C. C., 2514 Forsyth Rd., Macon
 Holmes, Mrs. J. P., 552 Overlook Drive, Macon
 Keen, Mrs. O. F., 117 Rogers Ave., Macon
 King, Mrs. J. L., 223 Buford Place, Macon
 Mass, Mrs. Max, 1004 Vineville Ave., Macon
 McLaughlin, Mrs. Chas. K., 921 Ingleside Ave., Macon
 Mobley, Mrs. Walter, 563 College St., Macon
 Newman, Mrs. W. A., 571 Orange St., Macon
 Newton, Mrs. Ralph, 650 Ridge Ave., Macon
 Patton, Mrs. Sam, 132 Beverly Place, Macon
 Phillips, Mrs. A. M., 109 Buford Place, Macon
 Richardson, Mrs. Charles, 359 Cherokee Ave., Macon
 Richardson, Mrs. Rhea, 2516 Forsyth Rd., Macon
 Rogers, Mrs. Thos. E., 120 Clisby Place, Macon
 Rozar, Mrs. A. R., Shirley Hills, Macon
 Smith, Mrs. Allen, 106 Florida Ave., Macon
 Thompson, Mrs. O. R., 112 Pio Nono Ave., Macon
 Ware, Mrs. Ford, 123 Inverness Ave., Macon
 Weaver, Mrs. H. G., 120 Callaway St., Macon
 Williams, Mrs. W. A., Stanislaus Circle, Macon
 Woods, Mrs. C. J., 179 North Ave., Macon

WASHINGTON COUNTY

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 Members

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 Newsome, Mrs. Emory G., Sandersville
 Newsom, Mrs. N. J., Sandersville
 Overby, Mrs. N., Sandersville
 Peacock, Mrs. E. S., Sandersville
 Rawlings, Mrs. F. B., Sandersville
 Rogers, Mrs. O. L., Sandersville
 Taylor, Mrs. R. L., Davisboro

SEVENTH DISTRICT

Manager, Mrs. J. E. Billings, Calhoun

COBB COUNTY

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 710 Church St., Marietta

Members

Allen, Mrs. G. O., 1005 Cherokee St., Marietta
 Bailey, Mrs. E. M., Acworth
 Benson, Mrs. Regina R., 406 Whitlock Ave., Marietta
 Davis, Mrs. E. S., Acworth
 Elder, Mrs. Clyde D., 509 Kennesaw Ave., Marietta
 Fowler, Mrs. Herbert, 1110 Cherokee St., Marietta
 Fowler, Mrs. Ralph, 303 McDonald St., Marietta
 Gober, Mrs. Maves, 1109 Powder Springs St., Marietta
 Griffin, Mrs. R. B., 504 Church St., Marietta
 Hagood, Mrs. George F., 710 Church St., Marietta
 Hagood, Mrs. Murl Miller, 617 Whitlock Ave., Marietta
 Lindley, Mrs. Frank, Powder Springs
 Mitchell, Mrs. W. C., Smyrna
 McCall, Mrs. Moses N., Acworth
 Perkinson, Mrs. William H., 819 Church St., Marietta
 Welch, Mrs. L. L., 1011 Church St., Marietta
 Musurra, Mrs. Elmer A., 121 Wright St., Marietta

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 334 S. Wall St., Calhoun

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Billings, Mrs. Jordan Eli, 222 South Wall St., Calhoun
 Hall, Mrs. Wilbur Dallas, 306 Willard St., Calhoun
 Johnston, Mrs. Zebulon Vance, 314 S. Wall St., Calhoun
 Walter, Mrs. Robert Daniel, 334 South Wall St., Calhoun

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 Elliott, Mrs. C. B., Cedartown
 Hagan, Mrs. Howard, Cedartown
 McGehee, Mrs. John M., Cedartown

Styles, Mrs. O. R., Cedartown

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EIGHTH DISTRICT

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GLYNN COUNTY

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Coe, Mrs. Malon, Brunswick

Collier, Mrs. T. W., Brunswick

Conn, Mrs. Webb, Brunswick

Greer, Mrs. C. B., Brunswick

Harris, Mrs. B. W., Brunswick

McDaniel, Mrs. S. P., Brunswick

Mitchell, Mrs. L. C., Brunswick

Simmons, Mrs. J. W., Brunswick

Thomas, Mrs. W. C., Brunswick

Willis, Mrs. T. V., Brunswick

Winchester, Mrs. M. E., Brunswick

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909 Carswell Ave., Waycross

Members

Bradley, Mrs. D. M., 629 Nichols St., Waycross

Brussell, Mrs. B. R., Euclid Ave., Waycross

DeLoach, Mrs. A. W., Cherokee Drive, Waycross

Flanagan, Mrs. W. M., 410 Remshart St., Waycross

Folks, Mrs. W. M., Cherokee Drive, Waycross

Gay, Mrs. Jos. R., 103 Penn Ave., Waycross

Hafford, Mrs. W. C., 229 Riverside Drive, Waycross

Johnson, Mrs. R. L., 509 Nichols St., Waycross

McCullough, Mrs. Kenneth, Satilla Blvd., Waycross

Minchew, Mrs. B. H., 412 Williams St., Waycross

Penland, Mrs. J. E., 912 Elizabeth St., Waycross

Reavis, Mrs. W. F., Satilla Blvd., Waycross

Sanders, Mrs. L. H., 208 Folks St., Waycross

Stoner, Mrs. W. P., 707 Haynes Ave., Waycross

Stephens, Mrs. C. M., 312 Hill St., Waycross

Whitner, Mrs. C. A., 501 Gilmore St., Waycross

NINTH DISTRICT

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Harris, Mrs. Ernest R., Winder

Matthews, Mrs. William L., Winder

McDonald, Mrs. Edward M., Winder

Randolph, Mrs. R. H., Winder

Randolph, Mrs. Wm. T., Winder

Ross, Mrs. Stephen Theo., Winder

*Russell, Mrs. Alexander B., Winder

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Coker, Mrs. Grady N., Canton

Coker, Mrs. Newt. J., Canton

Pettit, Mrs. John T., Canton

Turk, Mrs. John Pierce, Nelson

Vansant, Mrs. T. J., Woodstock

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Hutchins, Mrs. W. J., Buford

Kelley, Mrs. D. C., Lawrenceville

Puett, Mrs. W. W., Norcross

Williams, Mrs. A. D., Lawrenceville

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Carter, Mrs. D. Earl, Atlanta

Crow, Mrs. Horace E., Alto

Duckett, Mrs. P. Young, Cornelia

Garrison, Mrs. David H., Clarkesville

Harden, Mrs. Otho N., Cornelia

Hardman, Mrs. Charles T., Tallulah

Jackson, Mrs. J. B., Clarkesville

Lamb, Mrs. E. H., Cornelia

Swain, Mrs. Bruce, Clarkesville

Ayers, Mrs. C. L., Toccoa

JACKSON COUNTY

President, Mrs. M. B. Allen, Hoschton

Members

Allen, Mrs. L. C., Hoschton

Allen, Mrs. M. B., Hoschton

Freeman, Mrs. Ralph, Hoschton

TENTH DISTRICT

CLARKE COUNTY

President, Mrs. H. W. Birdsong

150 University Drive, Athens

Members

Banister, Mrs. H. G., Ila

Birdsong, Mrs. H. W., 150 University Drive, Athens

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President, Mrs. J. W. Thurmond,

R. F. D. No. 3, Box 610, Augusta

Members

Akerman, Mrs. Joseph, 831 Fifteenth St., Augusta

Allen, Mrs. Lane, Minnesota, RFD No. 3, N. Augusta

Batthey, Mrs. W. W., Sr., 826 Hickman Rd., Augusta

Batthey, Mrs. W. W., Jr., 2239 Kings Way, Augusta

Briggs, Mrs. Alfred P., Colonial Courts Apt., Augusta

Burpee, Mrs. Claude M., 1127 Monte Sano Ave., Augusta

Chaney, Mrs. Ralph H., Bransford Rd., F. Hills, Augusta

Harper, Mrs. H. T., 2739 Walton Way, Augusta

*Harrison, Mrs. F. N., Naval Amm. Depot, Charleston, S. C.

Hitchcock, Mrs. J. P., Bransford Rd., F. Hills, Augusta

Kelly, Mrs. G. Lombard, 2131 Gardner St., Augusta

Lee, Mrs. F. Lansing, 901 Heard Ave., Augusta

Leonard, Mrs. Robert E., Lake Forest Dr., Forest Hills, Augusta

Matthews, Mrs. W. Eugene, 2735 Walton Way, Augusta

*McDaniel, Mrs. J. Z., Warrenton

McGahee, Mrs. Robt. C., 2817 Hillcrest Ave., Augusta

Milligan, Mrs. King W., 942 Greene St., Augusta

*Mulherin, Mrs. Chas. M., Bransford Rd., Augusta

*Philpot, Mrs. Wm. K., 2423 Kings Way, Augusta

*Phinizz, Mrs. Thos. B., Greene St., Augusta

Rhodes, Mrs. Robt. L., 2501 Belleview Ave., Augusta

Risteen, Mrs. W. A., 2238 Kings Way, Augusta

Sanderson, Mrs. Everett S., 1030 Katherine St., Augusta

*Sherman, Mrs. John H., 2350 McDowell St., Augusta

Tessier, Mrs. Claude E., Buena Vista Drive, F. Hills, Augusta

Thurmond, Mrs. W. J., R. F. D. No. 3, N. Augusta

Todd, Mrs. Lucius N., Wrightsboro Rd., F. Hills, Augusta

Torpin, Mrs. Richard, 2618 Walton Way, Augusta

Traylor, Mrs. George A., 2311 Kings Way, Augusta

Volpitt, Mrs. Perry P., Bransford Road, F. Hills, Augusta

*Williams, Mrs. J. W., 818 Russell St., Augusta

Woodbury, Mrs. Robert A., 2817 Helen St., Augusta

Woods, Mrs. L. C., Augusta

MEMBERS-AT-LARGE

Chason, Mrs. Gordon, Bainbridge, 43-44

Ehrlich, Mrs. M. A., Bainbridge, 43-44

Fort, Mrs. M. A., Bainbridge, 1944

Garrett, Mrs. John A., Meigs, 43-44

Revell, Mrs. S. T. R., Louisville, 1944

Smith, Mrs. Inman, Rome, 1944

Sharp, Mrs. C. K., Arlington, 1944

Wheat, Mrs. R. F., Bainbridge, 43-44

Wilkinson, Mrs. W. L., Bainbridge, 43-44

Willis, Mrs. L. W., Bainbridge, 43-44

*Husband in military service.

MEDICAL ASSOCIATION OF GEORGIA

Ninety-Sixth Annual Session

MACON

MAY 8, 9, 10, 11, 1945

OFFICERS AND COMMITTEES, 1944-1945

Officers

President.....	Cleveland Thompson, Millen
President-Elect.....	Ralph H. Chaney, Augusta
First Vice-President.....	Ruskin King, Savannah
Second Vice-President.....	J. B. Kay, Byron
Parliamentarian.....	Jno. W. Simmons, Brunswick
Secretary-Treasurer.....	Edgar D. Shanks, Atlanta

Delegates to A. M. A.

Wm. A. Mulherin (1945-46).....	Augusta
Alternate, B. H. Minchew.....	Waycross
Alles H. Bunce (1945-46).....	Atlanta
Alternate, H. C. Sauls.....	Atlanta
Olin H. Weaver (1944-45).....	Macon
Alternate, C. K. Sharp.....	Arlington

Council

Steve P. Kenyon, Chairman.....	Dawson
Marion C. Pruitt, Clerk.....	Atlanta

Councilors

1. Lee Howard (1945).....	Savannah
2. C. K. Wall (1945).....	Thomasville
3. Steve P. Kenyon (1945).....	Dawson
4. Kenneth S. Hunt (1945).....	Griffin
5. Marion C. Pruitt (1946).....	Atlanta
6. H. D. Allen, Jr. (1946).....	Milledgeville
7. W. H. Perkinson (1946).....	Marietta
8. W. F. Reavis (1946).....	Waycross
9. C. B. Lord (1947).....	Jefferson
10. Harry L. Cheves (1947).....	Union Point

Vice Councilors

1. Chas. T. Brown (1945).....	Guyton
2. C. H. Watt (1945).....	Thomasville
3. Guy J. Dillard (1945).....	Columbus
4. Enoch Callaway (1945).....	LaGrange
5. S. A. Kirkland (1946).....	Atlanta
6. H. G. Weaver (1946).....	Macon
7. D. Lloyd Wood (1946).....	Dalton
8. Alton M. Johnson (1946).....	Valdosta
9. D. H. Garrison (1947).....	Clarkeville
10. J. Victor Roule (1947).....	Augusta

Executive Committee

Cleveland Thompson, President.....	Millen
Steve P. Kenyon, Chairman, Council.....	Dawson
Edgar D. Shanks, Secretary-Treasurer.....	Atlanta

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W. S. Goldsmith.....	President, 1915-1916
E. E. Murphey.....	President, 1917-1918
J. W. Palmer.....	President, 1918-1919
J. W. Daniel.....	President, 1923-1924
F. K. Boland.....	President, 1925-1926
W. A. Mulherin.....	President, 1927-1928
C. K. Sharp.....	President, 1928-1929
Wm. R. Dancy.....	President, 1929-1930
M. M. Head.....	President, 1932-1933
C. H. Richardson.....	President, 1933-1934
Clarence L. Ayers.....	President, 1934-1935
James E. Paullin.....	President, 1935-1936
B. H. Minchew.....	President, 1936-1937
Grady N. Coker.....	President, 1938-1939
J. C. Patterson.....	President, 1940-1941

Allen H. Bunce.....	President, 1941-1942
James A. Redfearn.....	President, 1942-1943
W. A. Selman.....	President, 1943-1944

Scientific Work

B. H. Minchew, Chairman (1945).....	Waycross
Ralph H. Chaney (1946).....	Augusta
Edward J. Whelan (1947).....	Savannah
Edgar D. Shanks, Secretary-Treasurer.....	Atlanta

Public Policy and Legislation

Spencer A. Kirkland, Chairman (1947).....	Atlanta
Edgar H. Greene (1946).....	Atlanta
J. L. Campbell (1945).....	Atlanta
Cleveland Thompson, President.....	Millen
Edgar D. Shanks, Secretary-Treasurer.....	Atlanta
T. F. Abercrombie, Director, State	

Department of Public Health.....	Atlanta
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Medical Defense

Marion C. Pruitt, Chairman (1948).....	Atlanta
B. H. Minchew (1944).....	Waycross
A. R. Rozar (1945).....	Macon
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Advisory State Board of Health

Edgar H. Greene, Chairman.....	Atlanta
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Marcus Mashburn.....	Cumming
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J. C. Brim.....	Thomasville
C. S. Pittman.....	Tifton
C. L. Ayers.....	Toccoa
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C. W. Roberts.....	Atlanta
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D. Henry Poer, Chairman (1948).....	Atlanta
R. H. Oppenheimer, Acting Chairman (1947).....	Atlanta
Cleveland Thompson (1949).....	Millen
L. P. Holmes (1945).....	Augusta
A. D. Little (1946).....	Thomasville
Q. A. Mulkey (1949).....	Millen
J. T. McCall (1949).....	Rome
T. G. Ritch (1949).....	Jesup

Revision of Pharmacopeia of U. S.

C. C. Aven, Chairman (1949).....	Atlanta
Allen H. Bunce (1949).....	Atlanta
Hal M. Davison (1949).....	Atlanta

Abner Wellborn Calhoun Lectureship

James E. Paullin, Chairman (1948).....	Atlanta
J. R. Broderick (1949).....	Savannah
Eugene E. Murphey (1945).....	Augusta
W. P. Harbin (1946).....	Rome
Frank K. Boland (1947).....	Atlanta
Guy O. Wheelchel (1949).....	Athens

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Major Fowler.....	Atlanta
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T. J. Busey.....	Fayetteville
J. C. Keaton.....	Albany
C. W. Roberts.....	Atlanta
G. Lombard Kelly.....	Augusta
Ruskin King.....	Savannah

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Grady N. Coker.....	Canton
Frank K. Boland.....	Atlanta
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Olin H. Weaver.....	Macon
J. Calvin Weaver.....	Atlanta
Eugene E. Murphey.....	Augusta
Wm. R. Dancy.....	Savannah
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R. F. Wheat.....	Bainbridge
R. C. Pendergrass.....	Americus
W. F. Jenkins.....	Columbus
Kenneth Hunt.....	Griffin
Enoch Callaway.....	LaGrange
E. L. Bishop.....	Atlanta
J. J. Clark.....	Atlanta
C. C. Harrold.....	Macon
N. J. Newsom.....	Sandersville
David L. Wood.....	Dalton
W. F. Reavis.....	Waycross
S. T. R. Revell.....	Louisville
H. M. McKemie.....	Albany
Hartwell Joiner.....	Gainesville
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J. J. Clark.....	Atlanta
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T. F. Abercrombie.....	Atlanta
J. V. Rogers.....	Cairo
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Edgar J. Bargerion.....	Waynesboro
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Willis P. Jordan.....	Columbus
Wallace Bazemore.....	Macon
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Harry Righton.....	Savannah
R. F. Wheat.....	Bainbridge
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E. F. Wahl.....	Thomasville
R. V. Martin.....	Savannah
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Joseph Yampolsky.....	Atlanta
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G. G. Lunsford.....	Atlanta
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S. P. Kenyon.....	Dawson
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J. F. Hanson.....	Macon
H. H. Allen.....	Decatur

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Kenneth McCullough.....	Waycross
R. L. Rogers.....	Gainesville

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Enoch Callaway.....	LaGrange
W. M. Field.....	Alhany
S. E. Sanchez.....	Barwick

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Alabama: D. S. Reese, Carrollton; Mercer Blanchard, Columbus; R. F. Wheat, Bainbridge.
Florida: Wm. W. Anderson, Atlanta; Grady N. Coker, Canton; Hal M. Davison, Atlanta.
North Carolina: Allen H. Bunce, Atlanta, and Ralph M. Goss, Athens.
South Carolina: G. Lombard Kelly, Augusta; Stewart D. Brown, Royston, and J. M. Byne, Jr., Waynesboro.
Tennessee: J. T. McCall, Rome, and Trammell Starr, Dalton.

*State Board of Health**

First District: James M. Byne, Jr., Waynesboro, Sept. 1, 1945.
Second District: C. K. Sharp, Arlington, Sept. 1, 1945.
Third District: Mr. R. C. Ellis, Americus, Sept. 1, 1948.
Fourth District: J. A. Corry, Barnesville, Sept. 1, 1949.
Fifth District: Mr. Robert F. Maddox, Sept. 1, 1948.
Sixth District: C. L. Ridley, Macon, Sept. 1, 1944.
Seventh District: W. P. Harbin, Jr., Rome, Sept. 1, 1944.
Eighth District: Henry W. Clements, Adel, Sept. 1, 1944.
Ninth District: Robert L. Rogers, Gainesville, Sept. 1, 1945.
Tenth District: D. N. Thompson, Elberton, Sept. 1, 1948.

*STATE OF GEORGIA AT LARGE†**Georgia Dental Association*

W. K. White, Savannah, Sept. 1, 1945.
J. G. Williams, Atlanta, Sept. 1, 1945.

Georgia Pharmaceutical Association

George Wright, Tifton, Sept. 1, 1947.
John W. White, Thomasville, Sept. 1, 1947.

*Nominated by their respective district medical societies and appointed for six-year terms.

†Nominated by their respective associations.

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L. G. Neal.....	Cleveland
J. I. Matthews.....	Dallas
R. F. Wheat.....	Bainbridge
Murdock Equeon.....	Atlanta
Steve P. Kenyon.....	Dawson
Harold P. McDonald.....	Atlanta
J. W. Palmer.....	Ailey
T. H. Clark.....	Douglas
Rufus A. Askew.....	Atlanta
Grady N. Coker.....	Canton

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Names of all Members and Officers are published as corrected by Secretaries of County Societies

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 Secretary-Treasurer Holt, J. T.

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 Kennedy, F. D., Baxley
 McCracken, H. C., Baxley
 Overstreet, E. J., Baxley

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 Vice-President Walker, E. Y.
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 Delegate Fulghum, C. B.
 Alternate Delegate Clodfelter, T. C.

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 Allen, H. D., Jr., Milledgeville
 Anderson, J. M., Milledgeville
 Anderson S. A., Milledgeville
 Bailey, L. A., Milledgeville
 Binion, Richard, Milledgeville
 Bostick, W. A., Milledgeville
 Bowen, U. S., Veterans Administration
 Facility, Tucson, Arizona
 Bradford, R. W., Milledgeville
 Bradley, J. D., Milledgeville
 Cary H. R., U. S. Army
 Clodfelter, Thos. C., Milledgeville
 Cornwell, Gibson K., Fitzgerald
 Cox, C. G., Milledgeville
 Echols Geo. L., Hardwick
 Fulghum, C. B., Milledgeville
 Garrard, J. I., Hardwick
 Mays, J. R. S., Station Hospital
 Fort Belvoir Virginia
 Mitchell, Frank, Sr., Milledgeville
 Rupp, Alice, Milledgeville
 Schwall, Edward W., Georgia Training
 School, Gracewood
 Sikes, Z. S., Milledgeville
 Stewart, J. Benham, care R. F. Jordan,
 Lumber City
 Walker, E. Y., Milledgeville
 Waller, C. P., Milledgeville
 Wiley, John D., Milledgeville
 Woods O. C., Milledgeville
 Yarbrough, Y. H., Milledgeville

BANKS COUNTY

Member

Jolley, J. S., Homer

BARTOW COUNTY

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 Horton, A. L., Cartersville
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 Quillian, Wm. B., 40 Field Hospital,
 APO 9648, care Postmaster, New York
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 Smith J. E., U. S. Army
 Ware, D. B., Fitzgerald
 Ware, R. M., Fitzgerald
 Willcox, W. D., U. S. Army
 Willis G. W., Ocilla

BIBB COUNTY

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 Vice-President Baxley, W. W.
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 Macon
 Bashinski, B., Doctors Bldg. Macon
 Baxley, W. W., Ga. Casualty Bldg.,
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 Macon
 Boswell, W. Chas., Persons Bldg.,
 Macon
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 Carey, R. Frank, Board of Health,
 Macon
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 Louisiana School of Medicine, New
 Orleans, La.

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 Bragg, N. C.
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 Macon
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 Macon
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 Macon
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 Rogers, T. E., 120 Clisby Place, Macon
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 Angeles. Calif.
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 Macon
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 eral Hospital, APO 63, care Postmas-
 ter, New York

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 Van Horn, Miss.
 Wayburn, Gates J., U. S. Army
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 Reese, D. S., Carrollton
 Roberts, O. W., Carrollton
 Scales, S. F., Carrollton, Rt. 1
 Smith, W. P., Bowdon
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 Savannah
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 Savannah
 Davis, Claude L., Hinesville
 deCaradeuc, St. J. R., DeRenne Apt.,
 Savannah
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 Savannah
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NEW GRANTS FOR PHYSICAL MEDICINE

The Administrative Board of the Baruch Committee on Physical Medicine has announced the granting of an additional total sum of \$185,000, which is being given by Mr. Bernard M. Baruch for the further advancement of the program in physical medicine and the physical rehabilitation of those disabled in the war. This sum has been divided into seven grants as follows: \$50,000 to the Massachusetts Institute of Technology, Cambridge, Massachusetts; \$40,000 to the Medical School of the University of Minnesota, Minneapolis, Minnesota; \$30,000 to the Medical School of Harvard University, Boston, Massachusetts; \$30,000 to the Medical School of the University of Southern California, Los Angeles, California; \$15,000 to the Medical School of the University of Iowa, Iowa City, Iowa; \$15,000 to the Medical School of the University of Illinois, Chicago, Illinois; \$5,000 to Marquette University Medical School, Milwaukee, Wisconsin.

The grants to Massachusetts Institute of Technology and the University of Minnesota are in addition to the gift of \$1,100,000 made by Mr. Baruch in April of 1944, at which time grants were made to Columbia University College of Physicians and Surgeons, New York University College of Medicine, the Medical College of Virginia and for minor research and fellowship programs for the advancement of physical medicine.

NEW HOSPITAL CAR

On November 13 the first of a new type hospital car for use in the United States was opened for inspection in Washington, D. C.

These new unit-type cars are not converted pullmans but are designed and built as hospital cars. They are ten feet longer, are air-conditioned, accommodate 38 patients and attendant personnel. Each includes two rows of triple-tiered beds, two compartments with three beds each, a stainless steel kitchen equipped with refrigeration, ice cream cabinet and coal range; a receiving room with four-foot side doors for loading and unloading litter patients; two roomettes, each with toilet and shower, for the medical staff or seriously ill patients; and a baggage compartment. The car also carries a modern pharmacy unit and sterilizing equipment and in case of emergency either the receiving room or one of the roomettes can be converted quickly into an operating room.

The Glennon-type, steel-frame beds are adjustable and unoccupied center bunks can be dropped to provide seating accommodations for ambulatory patients.

Six more of these cars are to be put in operation this month, November; 18 in December and 75 during January, February and March of next year—bringing the total to 100, in addition to the 120 converted hospital cars now in use.

The Journal
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of Georgia

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January-December, 1944

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VITAMIN SUPPLEMENTS

(Continued from page 365)

counter to people who have no obvious disease, is justified. It has been argued that such vague symptoms as weakness, nervousness, fatigability and insomnia can result from a vitamin deficiency and therefore, when such symptoms appear, vitamin therapy should be instituted. Recent surveys, with the recommended daily allowances of the National Research Council as a guide, have indicated that the average American diet often is not adequate to maintain optimal nutrition. This has been used as an additional argument for the administration of vitamins to people without obvious disease on the assumption that they may actually have a 'subclinical deficiency' of which they are not aware. It has been implied that, even when no demonstrable deficiency exists, one's sense of well-being and ability to perform work can be improved greatly

by the addition of vitamins to the diet. As pointed out by the Councils on Food and Nutrition and on Industrial Health (of the American Medical Association) there is at present no conclusive evidence to substantiate this point of view. . . ."

All of those participating in the study continued their usual activities and ate essentially the same diet. Each subject was given a work sheet to be kept daily and was instructed to record his impression as to the effect of the medication he was taking on the appetite, energy and "pep," general health, "gas" or indigestion, nausea, vomiting, the number of stools per day, abdominal pain and weight. No subject knew what he was receiving or to what group he belonged. At the beginning of the experiment they were told that one group would receive placebos (sugar pills) and the remainder various vitamins. There were 200 subjects selected for the investigation. Reliable data were obtained from 182. The subjects were divided into five groups. Those in group A received 3 vitamin tablets per day and 6 liver extract tablets. Those in group B received 3 vitamin tablets per day and 6 yeast tablets. Those in Group C received 3 vitamin tablets per day and 6 placebos per day. Those in group D received 3 vitamin tablets per day and those in group E received 6 placebos per day. The supplements used were of the same size and appearance so that identification was difficult, if not impossible, without chemical analysis.

The vitamin tablets, which were the usual government issue and furnished by the Office of the Quartermaster General, contained 2,500 U. S. P. units of vitamin A, 200 U. S. P. units of vitamin D, 1 mg. of thiamine hydrochloride, 1.5 mg. of riboflavin, 27.5 mg. of ascorbic acid, and 10 mg. of nicotinamide.

In analyzing the results, it was found that in regard to appetite 6 in group A reported improvement and 31 no change. In group B, 3 reported improvement, 32 no change and 3 a decrease. In group C, 9 reported an improvement, 24 no change and 2 a decrease. In group D, 5 reported an improvement, 28 no change and 2 a decrease. In group E, which received only the placebos, 5 reported an improvement, 29 no change and 1 a decrease. About the same ratio between the various groups was reported in regard to the other classifications.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

The Medical Association of Georgia will hold its next annual meeting at the City Auditorium, Macon, May 8-11, 1945.

NEWS ITEMS

Dr. Conway Hunter, Atlanta, announces that after Nov. 1, 1944, his practice will be limited to obstetrics and gynecology. Office 770 Cypress Street.

Dr. Cleveland Thompson, Millen; Dr. Spencer A. Kirkland, Dr. C. W. Roberts and Dr. Edgar D. Shanks, Atlanta, attended the Annual Conference of State Secretaries and Editors, American Medical Association Building, Chicago, November 16-18, 1944.

A two-day meeting of the Southern Section of the American Federation for Clinical Research is being planned. The meeting will be held in Dallas the latter part of January 1945.

Investigators wishing to present papers will please submit an abstract of not over 200 words to the chairman, Dr. Alfred W. Harris, 812 Medical Arts Building, Dallas 1, Texas, by Jan. 1, 1945.

The members of the Bibb County Medical Society were entertained by the Mercy Hospital staff at a dinner Nov. 21, 1944, which featured an address by Col. Louis Krause, chief medical officer at Lawson General Hospital, Atlanta. "Clinical Cases" were discussed.

The Georgia Medical Society held its regular meeting November 28, at the society's hall, 612 Drayton St. Lt. Col. V. E. Powell and Captain A. J. Arlon, members of the U. S. Army Medical Corps stationed at Camp Stewart, read papers. Colonel Powell discussed "Rheumatic Fever."

Captain Arlon discussed "Chronic Arthritis: Differential Diagnosis."

Members of the armed forces were especially invited to hear these presentations.

The Georgia State Chapter of the National Foundation for Infantile Paralysis has issued a leaflet entitled "The Fight Against Infantile Paralysis Continues." Briefly, this leaflet includes data on the causative agent of this dread infection, the virus; progress in virus research; the after-effects, and suggested methods of fighting infantile paralysis.

Polio cases throughout the nation so far this year have been more than 16,000, the second highest total in the country's history.

While we have been fortunate in having only 88 cases in Georgia, the National Foundation has sent emergency aid to twenty-one states and the District of Columbia.

The Georgia Baptist Hospital staff meeting was held November 21. An interesting program was planned by Dr. Major Fowler, chairman of the Clinico-Pathologic Committee.

Dr. H. B. Bray, of Wrightsville, held the formal opening of his hospital November 10, which is a modern unit where 22 patients can be cared for. The hospital is an asset to Wrightsville and Johnson County. A turkey dinner was served in the hospital dining room with Dr. Bray as toastmaster. Talks were made by Dr. W. A. Mulherin, Augusta; Dr. George W. Fuller, Atlanta, and Dr. R. E. Newberry Atlanta. Dr. Bray, Mrs. R. Earl Brinson, Mrs. J. G. Brantley, Mrs. T. L. Bray, Mrs. H. B. Bray, Mrs. H. B. Hutchinson, and Miss Geneva Bray assisted the staff in making a most enjoyable evening.

Visiting physicians: Dr. E. B. Claxton, Dublin; Dr. C. G. Moye, Dublin; Dr. O. H. Cheek, Dublin; Dr. W. A. Mulherin, Augusta; Dr. George W. Fuller, Atlanta; Dr. R. E. Newberry, Atlanta; Dr. E. G. Newsome, Sandersville; Dr. N. J. Newsom, Sandersville; Dr. R. L. Helton, Sandersville; Dr. L. L. Rawls, Macon; Dr. R. L. Taylor, Davisboro; Dr. P. B. Bedingfield, Wrightsville; Dr. J. G. Brantley, Wrightsville; Dr. Phillip S. Bayne, Wrightsville; Rev. J. F. Snell, Rev. W. R. Foster, Wrightsville; and Mr. C. W. Outlaw, Atlanta. Dr. Bray is a member of the Laurens County Medical Society.

The Field Army of the American Society for the Control of Cancer, Inc., Georgia Division, met at the Biltmore Hotel, Atlanta, Nov. 17, 1944. Welcome by Mrs. Murdock Equen, state commander. Talks: "Phases of Cancer Control," Dr. T. C. Davison, Dr. Calvin B. Stewart Dr. W. J. Murphy, and Dr. J. Elliott Scarborough, all of Atlanta. Luncheon, main dining room, Mrs. Equen presiding. Introduction of Mrs. Harold V. Milligan, national commander, by Ralph McGill, editor *Atlanta Constitution*. Address by Mrs. Milligan. Citations and awards, Mrs. H. B. Ritchie, regional commander. Consultations with Mrs. Milligan, Mrs. Ritchie and Mrs. Equen. Visits to clinics and Free Cancer Home.

Dr. Roger W. Dickson has recently been made professor and chairman of the Department of Pediatrics in the Medical School of Emory University. With this appointment, Dr. Dickson was also made chief of the pediatric service of Grady Memorial Hospital, Atlanta.

Dr. D. B. Terry, of Homerville, and connected with the Huey Hospital for the past two and a half years, has been called into the service of the U. S. Navy and is on duty at the Charleston Navy Yard, Charleston, S. C.

Dr. James Edgar Paullin, Atlanta physician and past president of the American Medical Association, received the 1944 award of the *Certificate of Distinguished Achievement* from the Atlanta Chamber of Commerce. The award was presented to Dr. Paullin at a dinner at the Ansley Hotel, Atlanta, given annually by the Chamber of Commerce to the person judged to have distinguished himself above others in behalf of permanent value to the welfare of Atlanta.

Dr. Ira A. Ferguson, head of the Emory medical group now serving in Southern France, has been promoted to the rank of full colonel. Before organizing the Emory Medical Unit, composed of leading Atlanta physicians, Dr. Ferguson served as assistant professor of surgery at Emory University. The Emory Unit left for overseas in August 1943. They now make up the Forty-third General Hospital, which has also seen service in North Africa and Italy. Dr. Ferguson was in charge of a surgical team which participated in the initial invasion of France.

Dr. L. L. Welch, Marietta, has succeeded Dr. Mayes Gober as local surgeon of the N. C. & St. L. R. R., the latter having resigned.

Dr. V. P. Sydenstricker, professor of medicine at the University of Georgia School of Medicine, Augusta, and physician-in-chief at the University Hospital, has ac-

cepted a commission with United Nations Relief and Rehabilitation Administration, as chief counsel in nutrition of Western Europe. His rank will be that of full colonel. He expects to be assigned to the London office. Dr. Sydenstricker has been granted six months' leave from the medical school and hospital.

As a medical director he will have charge of organizing the health service of all the nations west of the Balkans which have been freed from the dominance of Germany. In his new work Dr. Sydenstricker said he will be continuing the work began when he made a study in 1942 in Great Britain under the auspices of the Rockefeller Foundation. He spent ten months studying the effects of food rationing on some 5,000 British civilians. He stated that he was anticipating with great interest his work among the stricken populace of war-torn Europe.

Dr. A. W. DeLoach and Dr. J. R. Gay entertained the members of the Ware County Medical Society November 2 at a dinner at the Hotel Ware. Following the dinner Dr. B. H. Minchew spoke on "Recent Advances in Ophthalmic Surgery."

Dr. Edgar Boling, Atlanta, recently was promoted to Lt. Colonel in the Army Medical Corps before reporting for foreign duty.

Dr. Julius F. Schneider, Atlanta, has returned from Chicago where he did post-graduate work in surgery and gynecology at Cook County Hospital. He also attended the North America Post-Graduate Medical Assembly.

OBITUARY

Dr. J. B. Palmer, aged 67, died at his residence in Thomasville, Nov. 3, 1944. Born in Augusta, the son of Joseph I. and Susan Logan Palmer, Dr. Palmer graduated from the University of Georgia School of Medicine in 1904. He became a resident of Thomasville, where there were many friends and kinsmen of his family, and immediately began the practice of medicine. He was a member of the Thomas County Medical Society, the Medical Association of Georgia and the Methodist Church. Surviving are his wife, Mrs. Susannah Gardiner Palmer, one son, Capt. J. I. Palmer, U. S. M. C., a daughter, Miss Susan Palmer, three grandsons and two sisters. Funeral services were held at the residence, 420 Hansell Street, Thomasville, with Rev. J. C. G. Brooks officiating. Interment in Laurel Hill Cemetery.

Dr. Claude B. Crawford, aged 71, prominent Fannin County physician, died Nov. 6, 1944, at his home in Blue Ridge. Dr. Crawford attended the Atlanta College of Physicians and Surgeons, now Emory University School of Medicine, and received his degree in medicine at the University of Alabama School of Medicine in 1905. He practiced medicine continuously at Blue Ridge and was active in city, county and state affairs. He was city physician of Blue Ridge and to Fannin County and was secretary of the Blue Ridge Medical Society, also a member of the Medical Association of Georgia. In addition to his wife, he is survived by one granddaughter, Frances Virginia Crawford, two brothers and three sis-

ters. Funeral services were held at the Blue Ridge Methodist Church.

Dr. Robert Douglas McKenzie, aged 34, popular young physician of Albany, was killed in action on Morotia Island, Pacific area, Oct. 27, 1944. He was a captain in the Medical Corps of the Army. Son of the late Dr. and Mrs. McKenzie of Cordele, Dr. McKenzie was a graduate of the University of Rochester School of Medicine and Dentistry, Rochester, N. Y., and interned in Grady Hospital, Atlanta, before going to Albany to open his offices. He was considered one of the that city's outstanding physicians before joining the Army two years ago. Survivors include his wife, Mrs. Avis Baker McKenzie; one son, Robert Douglas McKenzie, Jr., and a sister, Mrs. Wilbur Owens, all of Albany. Dr. McKenzie was a member of the Dougherty County Medical Society, the Medical Association of Georgia, the First Baptist Church of Albany and the local Kiwanis Club.

MILK IN RELATION TO FOOD-BORNE DISEASE

(Continued from page 364)

F. within 10 minutes. Thus the temperature and time exposure for pasteurization has been definitely established and pasteurizing process is designed for 143° F. for 30 minutes, or for 160° F. for 15 seconds.

There is now and will continue to be an increasing responsibility placed upon state and local health departments for safe milk. Milk sanitation must necessarily be under the local administration of the city and of the local health department with assistance from the state. This must be accomplished by adoption of a local ordinance. The efficiency of the ordinance is dependent upon the local health department. The health officer should have ample support from the city administration and the local board of health.

It sometimes happens that the dairy industry has representation in local government. When such local representation has sincere interest in both the industry and in public health, the health department has a real asset. On the other hand, selfish interest can jeopardize the program for a safe milk supply.

One of the main difficulties in obtaining a safe milk supply is because the uninformed and indifferent consumer stands as an obstacle between the health officer and the milk producer. The producer is in business primarily for financial profit. He is willing to go along with the health officer if such officer represents the consumer's desire for a safe milk supply. Generally if the consumer is satisfied the producer is satisfied. Unfortunately too often the consumer's only concern is for convenient and prompt delivery at reasonable cost. Therefore it is evident that many difficulties of the health officer would diminish if between the producer and himself he could have public health educated milk consumers. Public health education is greatly needed to stimulate interest in safe milk.

It seems also that the practicing physician has an opportunity and an obligation. The family physician is often consulted by the family relative to a safe milk supply. The family physician has an opportunity to assist the family, the health officer, and the milk producer.

For post-war planning purposes, the United States Public Health Service in cooperation with state health departments has made a report on the need for additional milk pasteurization plants in the various states. This report indicates that a total of 438 new plants are needed at an estimated cost of \$8,123,500. This report indicated an estimated need for 45 additional plants for Georgia at a total cost of \$907,000. It is interesting to note that approximately 10 per cent of these plants are needed in Georgia. This is because the consumption of milk in Georgia has increased at a rate out of proportion to provision for pasteurization.

There can be no question of the fact that milk sanitation is one of the most important of public health problems. It evidently will become greater after the war because we will have a nation of high per capita milk consumption. For the first time in history, milk is required in the daily diet for all soldiers and sailors. On the home front milk is rendering a valuable war service. Milk drinking in war and industrial plants is generally promoted and usually required. A great number of persons who have not previously consumed milk will be milk consumers after the war and consequently more will be exposed to milk-borne diseases.

Faced with the greatest demand for milk ever known the dairy industry's production record is outstanding. In 1942 the industry produced 56½ billion quarts and in 1943 production totaled 56¼ billion quarts. This 1943 production was from approximately 26 million cows. It is anticipated that production will go higher in 1944. Thus it behooves state and local health departments to see that with increasing production and consumption the quality is maintained in order to protect the public health. Milk is the best of all foods, therefore all health authorities should promote production, consumption and quality.

L. M. CLARKSON, *Director*,
Division of Public Health Engineering,
Georgia Department of Public Health.

CRITICAL NEED FOR ARMY NURSES CONTINUES

Out of 27,000 recruiting letters sent by the Army Nurse Corps to nurses classified as 1-A for military service by the War Manpower Commission, only 710 replies have been received, and less than a third of these are from nurses qualified for commissions.

While the drive to recruit Army nurses lags, the number of patients being evacuated from overseas to the United States has been increased almost 300 per cent. In addition the overseas requirements for nurses continues to grow, with the quota for the month of December alone set at approximately 1,000 nurses.

MASSACHUSETTS MEDICAL SOCIETY ESTABLISHES BUREAU OF CLINICAL INFORMATION

The Massachusetts Medical Society has established a Bureau of Clinical Information at its headquarters, 8 Fenway, Boston, Massachusetts, as a means of augmenting its postgraduate educational effort.

This Bureau will supply information as to the daily activities of the approved hospitals in Boston and its immediate vicinity.

This information will deal with each hospital's schedules of operations for the day, medical and surgical ward rounds, clinics, the location of such clinics and the names of those presiding over these various activities.

From time to time the Bureau will make available a bulletin which will list the fixed medical meetings and conferences held in the metropolitan area. This bulletin will be sent to Hospitals, Medical Schools, and Physicians on request, and will be available at the Bureau. In brief, its ultimate aim will be to serve the profession as a clearing house for all sorts of medical information.

The Bureau will be open from 7:00 a.m. to 10:00 a.m. and from 3:00 p.m. to 8:00 p.m. except Saturday afternoons. Information will be given by telephone.

PAY ALLOWANCES FOR WOMEN MEDICAL OFFICERS

Legislation under which women officers of the Army Medical Corps will be entitled to receive the same pay allowances for their dependents as are paid to all other commissioned personnel of the Army became effective on October 1.

An act authorizing the commissioning of women physicians in the Medical Corps was approved in April 1943, and provided that they should "receive the same pay and allowances and be entitled to the same rights, privileges and benefits as members of the Officers Reserve Corps of the Army." The Comptroller General subsequently ruled that they were not entitled to allowances for dependents.

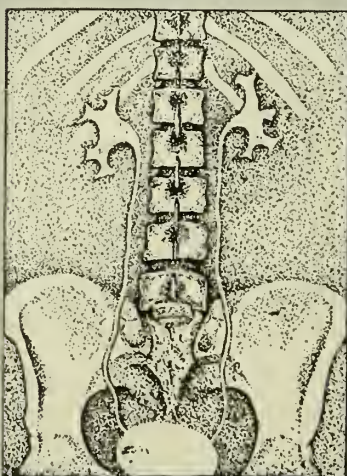
The new law, designed to meet the Comptroller General's objections is not retroactive to the date of women officers' commissions. The dependents for whom allowances may be paid are "husband, a child or children, or a parent or parents in fact dependent" upon the officer "for their chief support."

Approximately 75 women have been commissioned to date in the Medical Corps.

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